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Radiological Habits Survey: Winfrith, 2019

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Radiological Habits Survey: Winfrith, 2019

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2020

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CONTENTS

KEY POINTS	7
SUMMARY	9
<i>Figure i. Comparison between 2003 and 2019 mean consumption rates for the high-rate groups for aquatic foods</i>	13
<i>Figure ii. Comparison between the 2003 and 2019 mean rates for the high-rate groups for intertidal occupancy and handling of fishing gear and sediment</i>	14
<i>Figure iii. Comparison between 2003 and 2019 mean consumption rates for the high-rate groups for terrestrial foods</i>	14
<i>Figure iv. Comparison between 2003 and 2019 maximum direct radiation occupancy rates</i>	15
1 INTRODUCTION	16
1.1 Regulatory framework	16
1.2 Radiological protection framework	17
2 THE SURVEY	19
2.1 Site activity	19
2.2 Survey objectives	20
2.3 Survey areas	20
<i>Figure 1. The Winfrith aquatic survey area</i>	22
<i>Figure 2. The Winfrith terrestrial and direct radiation survey areas</i>	23
2.4 Conduct of the survey.....	24
3 METHODS FOR DATA ANALYSIS	27
3.1 Data recording and presentation	27
3.2 Data conversion.....	27
3.3 Rounding and grouping of data	28
<i>Table A. Names of age groups and range of ages within each age group</i>	28
3.4 Approaches for the identification of high rates	29
3.5 Profiles of habits survey data for use in <i>total dose</i> assessments	30
3.6 Data quality.....	30
4 AQUATIC RADIATION PATHWAYS	32
4.1 Aquatic survey area.....	32
<i>Figure 3. Portland Bill</i>	32
<i>Figure 4. Isle of Portland looking towards Ferry Bridge and Weymouth</i>	33
<i>Figure 5. Ferry Bridge with East Fleet lagoon in the background</i>	34
<i>Figure 6. Map of Weymouth Harbour</i>	34
<i>Figure 7. Weymouth Harbour</i>	35
<i>Figure 8. Weymouth beach</i>	35
<i>Figure 9. Osmington Mills beach</i>	36
<i>Figure 10. Ringstead beach</i>	36
<i>Figure 11. Lulworth Cove</i>	37
<i>Figure 12. Kimmeridge Bay</i>	38
4.2 Commercial fisheries	38
4.3 Destination of seafood originating from the aquatic survey area	39
4.4 Angling and non-commercial shellfish collection.....	39
4.5 Wildfowling	39
4.6 Other pathways	39
4.7 Food consumption data	40
<i>Table B. Summary of adults' consumption rates of foods from the aquatic survey area</i>	40
<i>Table C. Summary of children's and infants' consumption rates of foods from the aquatic survey area</i>	42
4.8 Intertidal occupancy.....	42

Table D. Summary of adults' intertidal occupancy rates	43
Table E. Summary of children's and infants' intertidal occupancy rates	44
4.9 Gamma dose rate measurements	44
Table F. Summary of gamma dose rate measurements taken over intertidal substrates	44
4.10 Handling of fishing gear and sediment	44
Table G. Summary of adults' handling rates of fishing gear and sediment	45
4.11 Water activities	45
5 TERRESTRIAL RADIATION PATHWAYS	47
5.1 Terrestrial survey area	47
5.2 Destination of food originating from the terrestrial survey area	48
5.3 The potential transfer of contamination off-site by wildlife	48
5.4 Food consumption data	49
Table H. Summary of adults' consumption rates of foods from the terrestrial survey area	50
Table I. Summary of children's and infants' consumption rates of foods from the terrestrial survey area	51
6 DIRECT RADIATION PATHWAYS	52
6.1 Direct radiation survey area	52
6.2 Residential activities	52
6.3 Leisure activities	53
6.4 Commercial activities	53
6.5 Occupancy rates	53
Table J. Summary of direct radiation occupancy rates	54
6.6 Gamma dose rate measurements	54
Table K. Summary of gamma dose rate measurements taken indoors and outdoors at properties in the direct radiation survey area	55
7 USES OF HABITS DATA FOR DOSE ASSESSMENTS	56
7.1 Combined pathways	56
7.2 Prenatal child dose assessment	56
7.3 Total dose assessment	56
8 COMPARISONS WITH THE PREVIOUS SURVEY	58
8.1 Aquatic survey area	58
Table L. Comparison between 2003 and 2019 consumption rates of aquatic food groups for adults	59
Table M. Comparison between 2003 and 2019 intertidal occupancy rates and handling rates of fishing gear and sediment for adults	60
8.2 Terrestrial survey area	61
Table N. Comparison between 2003 and 2019 mean consumption rates for the adult high-rate groups for terrestrial food groups (kg y^{-1} and l y^{-1})	62
8.3 Direct radiation survey area	63
Table O. Comparison between 2003 and 2019 direct radiation occupancy rates for all age groups combined (h y^{-1})	63
9 MAIN FINDINGS	64
9.1 Aquatic survey area	64
9.2 Terrestrial survey area	65
9.3 Direct radiation survey area	66
10 HABITS SURVEY INFORMATION FOR CONSIDERATION IN THE SELECTION OF SAMPLES AND MEASUREMENTS FOR MONITORING PROGRAMMES	67
10.1 Summary of the monitoring programmes for Winfrith	67
10.2 Information from the 2019 Winfrith habits survey for use in the selection of samples and measurements for monitoring programmes	68
11 ACKNOWLEDGEMENTS	70
12 REFERENCES	71

TABLES

Table 1	Survey coverage
Table 2	Typical food groups used in habits surveys
Table 3	Adults' consumption rates of fish (kg y^{-1}) from the Winfrith aquatic survey area
Table 4	Adults' consumption rates of crustaceans (kg y^{-1}) from the Winfrith aquatic survey area
Table 5	Adults' consumption rates of molluscs (kg y^{-1}) from the Winfrith aquatic survey area
Table 6	Adults' consumption rates of marine plants/algae (kg y^{-1}) from the Winfrith aquatic survey area
Table 7	Children's and infants' consumption rates of fish (kg y^{-1}) from the Winfrith aquatic survey area
Table 8	Children's and infants' consumption rates of crustaceans (kg y^{-1}) from the Winfrith aquatic survey area
Table 9	Children's and infants' consumption rates of molluscs (kg y^{-1}) from the Winfrith aquatic survey area
Table 10	Children's and infants' consumption rates of marine plants/algae (kg y^{-1}) from the Winfrith aquatic survey area
Table 11	Adults' intertidal occupancy rates (h y^{-1}) in the Winfrith aquatic survey area
Table 12	Children's and infants' intertidal occupancy rates (h y^{-1}) in the Winfrith aquatic survey area
Table 13	Gamma dose rate measurements over intertidal substrates ($\mu\text{Gy h}^{-1}$) in the Winfrith aquatic survey area
Table 14	Adults' handling rates of fishing gear and sediment (h y^{-1}) in the Winfrith aquatic survey area
Table 15	Adults' occupancy rates in and on water (h y^{-1}) in the Winfrith aquatic survey area
Table 16	Children's and infants' occupancy rates in and on water (h y^{-1}) in the Winfrith aquatic survey area
Table 17	Adults' consumption rates of green vegetables (kg y^{-1}) from the Winfrith terrestrial survey area
Table 18	Adults' consumption rates of other vegetables (kg y^{-1}) from the Winfrith terrestrial survey area
Table 19	Adults' consumption rates of root vegetables (kg y^{-1}) from the Winfrith terrestrial survey area
Table 20	Adults' consumption rates of potato (kg y^{-1}) from the Winfrith terrestrial survey area
Table 21	Adults' consumption rates of domestic fruit (kg y^{-1}) from the Winfrith terrestrial survey area
Table 22	Adults' consumption rates of milk (l y^{-1}) from the Winfrith terrestrial survey area
Table 23	Adults' consumption rates of cattle meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 24	Adults' consumption rates of pig meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 25	Adults' consumption rates of sheep meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 26	Adults' consumption rates of poultry (kg y^{-1}) from the Winfrith terrestrial survey area
Table 27	Adults' consumption rates of eggs (kg y^{-1}) from the Winfrith terrestrial survey area
Table 28	Adults' consumption rates of wild/free foods (kg y^{-1}) from the Winfrith terrestrial survey area
Table 29	Adults' consumption rates of rabbits/hares (kg y^{-1}) from the Winfrith terrestrial survey area
Table 30	Adults' consumption rates of honey (kg y^{-1}) from the Winfrith terrestrial survey area
Table 31	Adults' consumption rates of wild fungi (kg y^{-1}) from the Winfrith terrestrial survey area
Table 32	Adults' consumption rates of venison (kg y^{-1}) from the Winfrith terrestrial survey area
Table 33	Adults' consumption rates of freshwater plants (kg y^{-1}) from the Winfrith terrestrial survey area
Table 34	Children's and infants' consumption rates of green vegetables (kg y^{-1}) from the Winfrith terrestrial survey area
Table 35	Children's and infants' consumption rates of other vegetables (kg y^{-1}) from the Winfrith terrestrial survey area

Table 36	Children's and infants' consumption rates of root vegetables (kg y^{-1}) from the Winfrith terrestrial survey area
Table 37	Children's and infants' consumption rates of potato (kg y^{-1}) from the Winfrith terrestrial survey area
Table 38	Children's and infants' consumption rates of domestic fruit (kg y^{-1}) from the Winfrith terrestrial survey area
Table 39	Children's and infants' consumption rates of cattle meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 40	Children's and infants' consumption rates of pig meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 41	Children's and infants' consumption rates of sheep meat (kg y^{-1}) from the Winfrith terrestrial survey area
Table 42	Children's and infants' consumption rates of poultry (kg y^{-1}) from the Winfrith terrestrial survey area
Table 43	Children's and infants' consumption rates of eggs (kg y^{-1}) from the Winfrith terrestrial survey area
Table 44	Children's and infants' consumption rates of wild/free foods (kg y^{-1}) from the Winfrith terrestrial survey area
Table 45	Children's and infants' consumption rates of honey (kg y^{-1}) from the Winfrith terrestrial survey area
Table 46	Children's and infants' consumption rates of wild fungi (kg y^{-1}) from the Winfrith terrestrial survey area
Table 47	Children's and infants' consumption rates of venison (kg y^{-1}) from the Winfrith terrestrial survey area
Table 48	Children's and infants' consumption rates of freshwater plants (kg y^{-1}) from the Winfrith terrestrial survey area
Table 49	Percentage contribution each food type makes to its terrestrial food group for adults
Table 50	Direct radiation occupancy rates for adults, children and infants (h y^{-1}) in the Winfrith area
Table 51	Analysis of direct radiation occupancy rates for adults, children and infants (h y^{-1}) in the Winfrith area
Table 52	Gamma dose rate measurements ($\mu\text{Gy h}^{-1}$) for the Winfrith direct radiation survey area
Table 53	Combinations of adult pathways for consideration in dose assessments in the Winfrith area

ANNEXES

Annex 1	Adults' consumption rates (kg y^{-1} and l y^{-1}) and occupancy rates (h y^{-1}) in the Winfrith area
Annex 2	Children's and infants' consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Winfrith area
Annex 3	Qualitative and estimated data for use in dose assessments
Annex 4	Ratios for determining consumption and occupancy rates for children and infants
Annex 5	Consumption rates (kg y^{-1} and l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Winfrith area, for use in dose assessments for prenatal children
Annex 6	Summary of profiles for adults in the Winfrith area for use in the assessment of <i>total dose</i>
Annex 7	Summary of profiles for the child age group (6 - 15 years old) in the Winfrith area for use in the assessment of <i>total dose</i>
Annex 8	Summary of profiles for the infant age group (0 - 5 years old) in the Winfrith area for use in the assessment of <i>total dose</i>
Annex 9	Summary of profiles for women of childbearing age in the Winfrith area, for use in assessments of <i>total dose</i> to prenatal children

KEY POINTS

- The maximum and mean consumption rates of marine fish decreased significantly in the 2019 Winfrith habits survey compared with the previous habits survey undertaken in 2003.
- A new pathway identified in 2019 was the consumption of seaweed collected from Portland Harbour and from the shore in the aquatic survey area.
- Intertidal occupancy was recorded over rock and over stones in 2019 but not in 2003.
- In 2019, there were significant decreases in the consumption rates of potato, domestic fruit, wild/free foods, honey and wild fungi. Conversely, the consumption of sheep meat and eggs significantly increased.
- The consumption of goat meat has ceased since the previous habits survey, because a family who consumed goat meat produced on their smallholding in 2003 had moved away from the terrestrial survey area. The consumption of freshwater fish has ceased since the previous habits survey because a fish farm had closed since the previous survey in 2003.
- In February 2019, Inutec Limited was granted a nuclear site licence and permit by the Office for Nuclear Regulation and the Environment Agency following Inutec's acquisition of buildings and land from the NDA. Previously, Inutec Limited was a tenant operating under the Magnox Limited's nuclear site licence and permit.
- Part of the Magnox Limited site has been decommissioned, delicensed and sold to the Dorset Innovation Park. Consequently, the size of the direct radiation survey area and the number of residential properties within the direct radiation survey area has decreased since the habits survey in 2003.
- The highest indoor, outdoor and total occupancy rates in the direct radiation survey area in 2019 were similar to those in 2003.

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SUMMARY

This report presents the results of a survey conducted in 2019 to determine the habits and consumption patterns of people living, working and pursuing recreational activities in the vicinity of the Winfrith nuclear licensed site in Dorset. Two site operators occupy the site: Magnox Limited and Inutec Limited. For the purpose of this habits survey, Magnox Limited and Inutec Limited are considered together as a single site. The site discharges gaseous wastes via stacks to the atmosphere and contains sources of direct radiation. Magnox Limited discharge liquid wastes into the English Channel via pipelines at Arish Mell. Inutec Limited transports liquid wastes by road to the Tradebe Fawley High Temperature Incineration site. Inutec Limited hold a non-nuclear permit at the Fawley site that controls this discharge and the liquid effluent is discharged into Southampton Water. Areas likely to be most affected by the discharges and sources of radiation were defined as the aquatic survey area for liquid discharges at Arish Mell, the terrestrial survey area for the deposition from gaseous discharges, and the direct radiation survey area for ionising radiation emanating directly from the site. The occupancy data collected from the direct radiation survey area are also applicable to inhalation and external exposure arising from gaseous releases from the site. Exposure pathways relating to the liquid discharges by Inutec Limited were not considered in this survey as the discharge point does not form part of the Inutec Limited nuclear licensed site.

The following potential exposure pathways were investigated:

- The consumption of food from the aquatic survey area
- Activities and occupancy over intertidal substrates
- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- The use of seaweed as a fertiliser or animal feed
- The consumption of food from the terrestrial survey area
- The use and destination of produce originating from the survey areas
- The consumption and use of groundwater and surface water in the terrestrial survey area
- The transfer of contamination off-site by wildlife
- Activities and occupancy within the direct radiation survey area
- Any new or unusual exposure pathways (e.g. fishing activity adjacent to the Winfrith pipeline outfall), increases in dose relating to Inutec Limited operations (e.g. the liquid waste transfer to the Tradebe Fawley site), and increased quantities of waste on site that could potentially elevate worker dose.

Information was collected from members of the public by means of interviews and the data obtained for 774 individuals are presented and discussed. High rates of consumption, intertidal occupancy and handling are identified using established methods comprising (a) a 'cut off' to define the high-rate group

and (b) 97.5th percentiles. The rates identified can be used in dose assessments. Additionally, profiles of integrated habits data are presented specifically for use in *total dose* assessments.

The aquatic survey area

The aquatic survey area (shown in Figure 1, page 22) covered all tidal waters and intertidal areas from Portland Bill in the west to St Alban's Head in the east, and the adjacent offshore sea area up to a direct line between these two points.

The main commercial fishing activities identified in the survey area were potting for brown crabs and common lobsters, hand diving for scallops, and commercial rod and line angling for bass. Gill netting and a very small amount of trawling also took place, primarily targeting plaice, thornback ray, bass and sea bream. A shellfish farm was located in East Fleet lagoon, which is adjacent to the western end of the survey area, where seawater flows from Portland Harbour under Ferry Bridge, and into the lagoon. A seaweed farm was identified in Portland Harbour.

The mean consumption rates for the adult high-rate groups (as defined in Section 3.4) for the separate aquatic consumption pathways for foods potentially affected by liquid discharges were:

- 21 kg y⁻¹ for fish
- 20 kg y⁻¹ for crustaceans
- 19 kg y⁻¹ for molluscs
- 3.9 kg y⁻¹ for marine plants/algae

The predominant foods consumed by the people in the adult high-rate groups were:

- For fish: mackerel and bass
- For crustaceans: common lobster and brown crab
- For molluscs: scallop, razor shell and whelk
- For marine plants/algae: sea spaghetti and sea beet

The main locations where intertidal activities were taking place were Portland Bill, Ferry Bridge, Weymouth, Greenhill, Lodmoor, Lulworth Cove and Kimmeridge Bay, which were popular for angling, water sports preparation and walking. The activities undertaken by adults in the high-rate groups for intertidal occupancy included angling, coastering instructing, working on the shore, lifeguard duties, dog walking and walking. The main locations where water sports were undertaken were Portland Harbour and Ferry Bridge. Sub-aqua diving was popular at wrecks found throughout the survey area. Seaweed was collected on a small scale from the shore in the survey area for commercial production of seaweed fertiliser.

Individuals in the child and infant age groups were recorded consuming aquatic foods, whilst only children were recorded undertaking activities in the aquatic survey area.

The terrestrial survey area

The terrestrial survey area (see Figure 2, page 23) covered all land and freshwater watercourses within 5 km of the Winfrith site centre. Thirty-five working farms and three smallholdings were identified within the terrestrial survey area. Arable crops (grass, wheat, maize, barley, oats), beef cattle (including store cattle), milk (from dairy cattle), pigs, lambs, turkeys, geese, salad leaves and watercress were produced on the farms. Arable crops were used or sold to local farms for animal feed. Farmers and their families were consuming milk, pork, beef, lamb, goose, turkey, chicken eggs and watercress produced on their own farms and smallholdings.

One allotment site with approximately 50 individual plots was located within the survey area; however, the survey team were not permitted access to the site. A wide variety of fruit and vegetables were grown in private gardens within the survey area. Chickens and ducks were kept for the production of eggs. No individuals were identified as using seaweed as a fertiliser. Four beekeepers were interviewed who kept hives in the survey area and the consumption and sale of honey was recorded. Game shooting took place on farmland in the area and pheasant, pigeon, partridge, rabbit and venison were consumed. Wild foods were collected and consumed including blackberries, rosehips, hawthorn fruit and mushrooms. Angling for trout was identified on the River Frome which was catch and release only.

Foods from the terrestrial survey area were consumed from the following 17 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; poultry; eggs; wild/free foods; rabbits/hares; honey; wild fungi; venison; freshwater plants. The mean consumption rates for the adult high-rate groups were above the national adult mean consumption rates that are used for comparison in habits surveys for the following eight food groups: green vegetables; other vegetables; root vegetables; cattle meat; sheep meat; poultry; eggs; honey.

Human consumption of groundwater from boreholes was identified at several farmhouses and livestock were identified drinking spring, stream and borehole water.

The potential transfer of contamination off-site by wildlife was investigated since, through this pathway, radionuclides could enter the food chain or contaminate the environment. The Winfrith site is located within a Site of Special Scientific Interest; therefore, limited wildlife control was undertaken. Reptile fences had been installed on the Magnox Limited site and there was rodent control in the Inutec Limited offices. Deer were regularly observed on both sites.

The direct radiation survey area

The direct radiation survey area (see Figure 2, page 23) covered the land within 1 km of the nuclear licensed site boundary. The occupancy data collected from the direct radiation survey area are also applicable to inhalation and external exposure pathways arising from gaseous releases from the site.

The occupancy rates were analysed in zones according to the distance from the Winfrith nuclear licensed site boundary. The zones were 0 – 0.25 km, >0.25 – 0.5 km and >0.5 – 1.0 km. The highest indoor, outdoor and total occupancy rates in all three zones were for residents.

Gamma dose rates were measured indoors and outdoors at most of the properties where interviews were conducted in the direct radiation survey area. Background readings were taken over grass at distances beyond 5 km from the Winfrith site centre. The measurements taken outdoors at the properties were not notably different from the background measurements but several of the indoor measurements were notably higher than the background readings. Since gamma dose rates are influenced by the nature of building materials, the substrate over which they are taken, and many other factors, the measurements taken inside properties are expected to be higher than those taken outdoors.

Additional exposure pathways

Any new pathways or increases in dose specifically relating to Inutec Limited operations were investigated at the request of the Environment Agency and the following information was obtained:

- Inutec Limited's planned exposure calculations consider that the majority of the environmentally reported measurements of direct radiation from the whole site emanate from the holding of wastes. The planned exposure calculations will not be affected by the change in business model from tenant site to independent commercial nuclear site. Inutec Limited do not currently foresee any future changes to their permitted discharges.
- Inutec Limited transports liquid wastes by road to the Tradebe Fawley High Temperature Incineration site, where the wastes are discharged into Southampton Water. The liquid waste is disposed via a designated point which discharges into Southampton Water. The potential exposure pathways from the Tradebe Fawley site that are associated with the Inutec Limited discharge were not considered within this habits survey since the discharge point does not form part of the Inutec Limited nuclear licensed site.
- A one-off incident occurred where one of the Winfrith twin pipelines (offshore of Arish Mell) had moved along the seabed and over the second twin pipeline. It was thought that a snagged fishing net had caused the pipeline to move, but no nets were found or recovered. The outfall pipelines are located within the Lulworth Ranges Sea Danger Area, and during firing periods, mariners are advised to avoid the sea danger areas for their own safety. Fishermen operate in this area when firing is not taking place.

Comparisons with the previous survey

Comparisons were made with the results from the previous Winfrith habits survey, which was undertaken in 2003. The comparisons are for adults. Reasons for changes in the consumption, occupancy and handling rates were identified for certain pathways and these are presented in Section 8 of the report. For the consumption rates of foods from the aquatic survey area, the main difference in 2019 was a significant decrease in the mean consumption rate for fish (see Figure i below). The consumption of seaweed was a new pathway in 2019. Various species of seaweed were collected from the shore and from Portland Harbour.

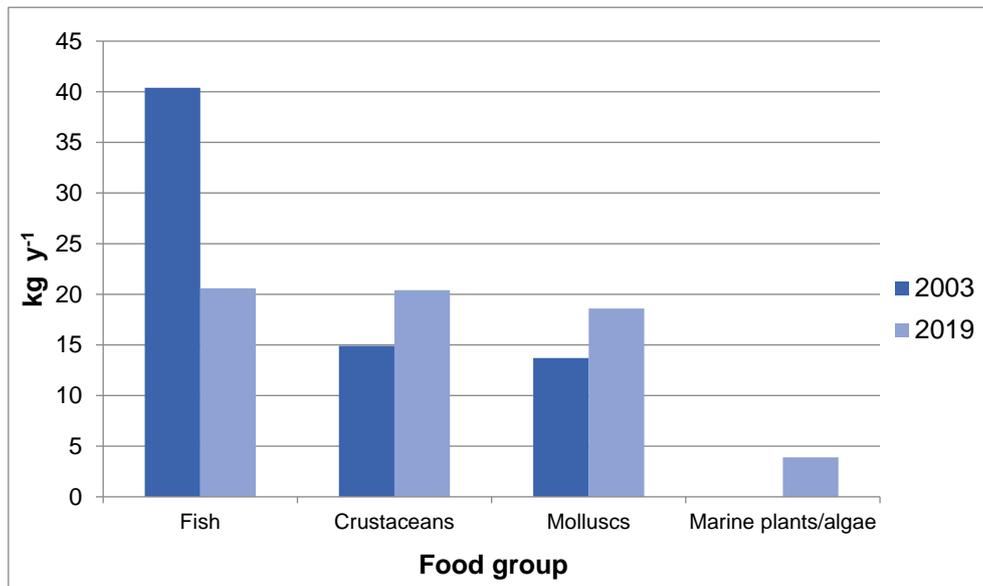


Figure i. Comparison between 2003 and 2019 mean consumption rates for the high-rate groups for aquatic foods

In 2019, the increase in the occupancy over sand was due to the identification of several people working on the shore. In 2019, activities were recorded over rock and over stones. Occupancy over these substrates was not recorded in 2003 (see Figure ii, page 14).

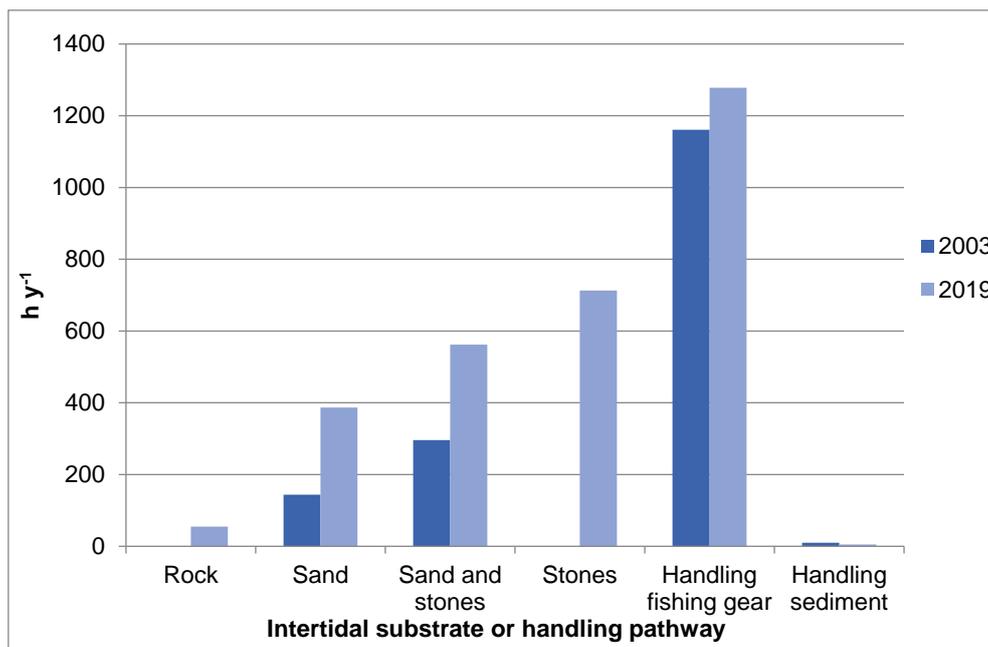


Figure ii. Comparison between the 2003 and 2019 mean rates for the high-rate groups for intertidal occupancy and handling of fishing gear and sediment

For the terrestrial survey area, the most notable changes in the consumption of foods were the decreases in the consumption of potato and domestic fruit, and the increase in the consumption of sheep meat (see Figure iii, below). The consumption of goat meat and freshwater fish were not identified in 2019 and the consumption of rabbits/hares was recorded in 2019 but not in 2003.

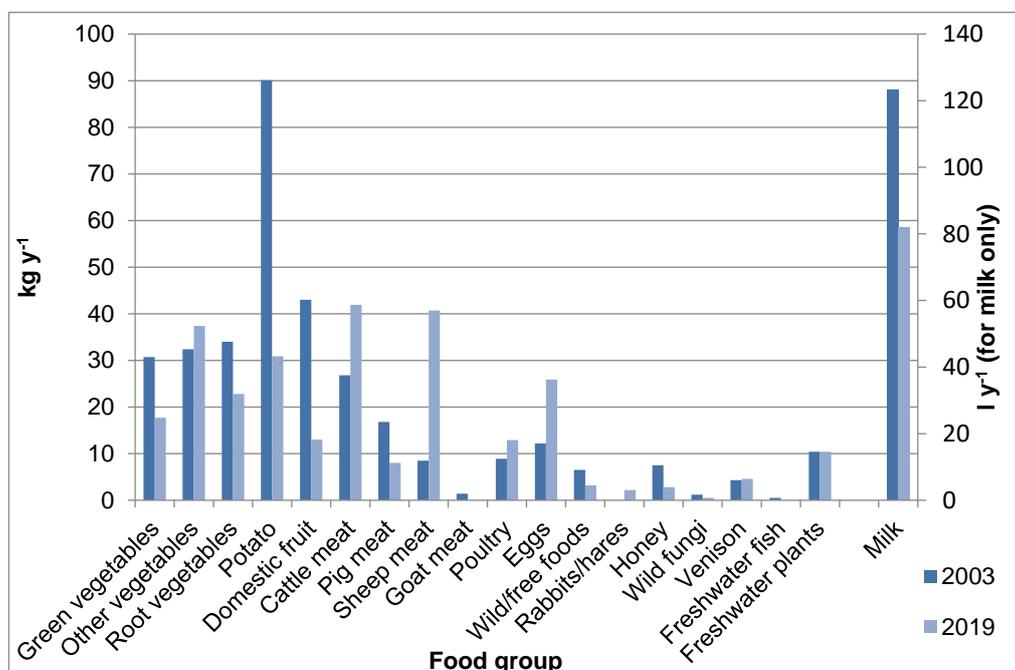


Figure iii. Comparison between 2003 and 2019 mean consumption rates for the high-rate groups for terrestrial foods

The direct radiation survey area had decreased in size since 2003 as part of the site had been delicensed. Occupancy rates in the direct radiation survey area in 2019 were broadly similar to those in 2003 (see Figure iv, below). The highest indoor, outdoor and total occupancy rates in all three zones were for residents.

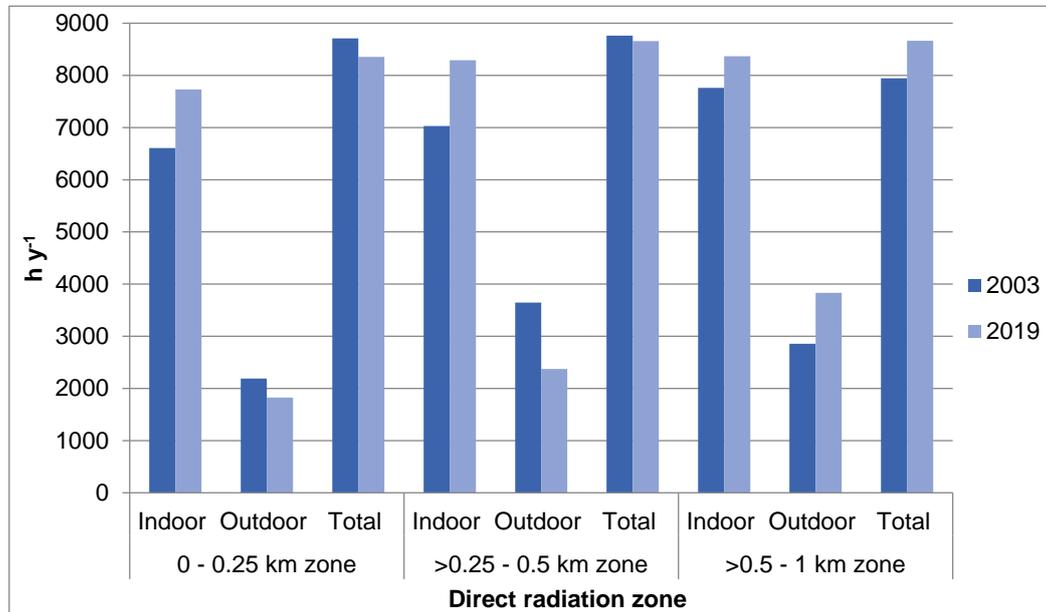


Figure iv. Comparison between 2003 and 2019 maximum direct radiation occupancy rates

Habits survey information for consideration when selecting samples and measurements for Environment Agency and Food Standards Agency monitoring programmes

The foods and intertidal locations identified in the 2019 Winfrith habits survey could be used to assist in the selection of samples and measurements for future monitoring programmes. The foods that were either consumed in the largest quantities in their food groups, or were the only food in their food group, are presented in Section 10.2 for considering sample selection for the Food Standards Agency radiological food monitoring programme. The current environmental monitoring programme carried out for the Environment Agency adequately covers the Winfrith area and no changes are suggested.

1 INTRODUCTION

Members of the public might be exposed to radiation as a result of the operations of the Winfrith nuclear site, either through the permitted discharges of liquid and/or gaseous radioactive wastes into the local environment, or from radiation emanating directly from the site. This report provides information on activities carried out by members of the general public in the vicinity of the Winfrith nuclear site, which may influence their radiation exposure. The study has been funded by the Environment Agency (EA), the Food Standards Agency (FSA) and the Office for Nuclear Regulation (ONR) in order to support their respective roles in protecting the general public from exposure to radiation.

UK policy on the control of radiation exposure has long been based on the recommendations of the International Commission on Radiological Protection (ICRP), which embody the principles of justification of practices, optimisation of protection and dose limitation. Radiological protection of the public is based on the concept of a 'representative person'. ICRP (2007) recommendations use the term 'representative person' for assessing doses to members of the public. It is defined as 'an individual receiving a dose that is representative of the more highly exposed individuals in the population'. The 'representative person' concept is considered equivalent to the previously used 'critical group'.

1.1 Regulatory framework

In England and Wales, the Environment Agency regulates the discharges of radioactive waste under the Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (UK Parliament, 2019). These new regulations transpose parts of the revised EU Basic Safety Standards (BSS) Directive 2013/59/Euratom (EC, 2014) which embody the recommendations of the ICRP, particularly ICRP 103 (ICRP, 2007). The revised BSS Directive was adopted in 2013 to consolidate and update existing Euratom provisions for protection against the harmful effects of ionising radiation by replacing five existing Directives and a Commission Recommendation into one Directive covering occupational, medical and public exposure (EC, 2014). Installation and operation of certain prescribed activities can only occur on sites if they are licensed under the Nuclear Installations Act 1965 (as amended) (NIA 65) (UK Parliament, 1965). The Office for Nuclear Regulation (ONR) has implemented this legislation and is also responsible for regulating, under the Ionising Radiations (Environmental and Public Protection) (Miscellaneous Amendments) (EU Exit) Regulations 2019 (IRR 19) (UK Parliament, 2019), the exposure of the public to direct radiation from the operations occurring on these sites.

Appropriate discharge limits are set by the Environment Agency, after wide-ranging consultations that include the Food Standards Agency. The Food Standards Agency is responsible for ensuring that any radioactivity present in food does not compromise food safety and that permitted discharges of

radioactivity do not result in unacceptable doses to consumers via the food chain. The Food Standards Agency also ensures that public radiation exposure via the food chain is within EU acceptable limits.

1.2 Radiological protection framework

Dose standards for the public are embodied in the national policy (UK Parliament, 2009; BEIS, 2018), in guidance from the International Atomic Energy Agency (IAEA), in the Basic Safety Standards for Radiation Protection (IAEA, 1996) and in European Community legislation in the EU BSS Directive 2013/59/Euratom (EC, 2014). The public dose standards were incorporated into UK law under IRR 19. The requirement to observe the conditions laid down in the Basic Safety Standards (BSS) in England and Wales is incorporated in the Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations 2019 (UK Parliament, 2019). These require that the environment agencies ensure, wherever applicable, that:

- All public radiation exposures from radioactive waste disposals are kept As Low As Reasonably Achievable (ALARA), with social and economic factors being taken into account
- The sum of all exposures does not exceed the dose limit of 1 mSv a year
- The dose received from any new source does not exceed 0.3 mSv a year
- The dose received from any single site does not exceed 0.5 mSv a year

The dose limit of 1 mSv per year to the public (excluding skin exposure) from all anthropogenic sources other than medical applications is also the recommendation made by the ICRP (ICRP, 2007).

The environment agencies are also required to ensure that the dose estimates are as realistic as possible for the population as a whole and for reference groups of the population. They are required to take all necessary steps to identify the reference groups of the population taking into account the effective pathways of transmission of radioactive substances. Guidance on the principles underlying prospective radiological assessments (i.e. assessments of potential future doses) were provided by the National Dose Assessment Working Group (NDAWG), which consisted of representatives of UK Government Bodies and other organisations with responsibilities for dose assessments (EA, SEPA, DoENI, NRPB and FSA, 2002). NDAWG also published principles underlying retrospective radiological assessment (i.e. assessment of doses already received from past discharges) (Allott, 2005) and possible methods of carrying out these assessments using the data from combined habits surveys (Camplin *et al.*, 2005). NDAWG agreed that the optimal method for performing retrospective dose assessments would be to use habits profiles (profiling method) as described in Camplin *et al.* (2005). This approach was adopted in Radioactivity in Food and the Environment (RIFE) publications, (e.g. EA, FSA, FSS, NRW, NIEA and SEPA, 2019). NDAWG published reports on the collection and use of habits survey data in retrospective and prospective dose assessments (NDAWG, 2005; NDAWG 2009); the principles described in these reports are consistent with those used here. The UK environment agencies, Public Health England (formerly, Health Protection Agency) and the Food Standards Agency

jointly produced an update of the 2002 interim guidance and principles for assessing prospective doses (EA, SEPA, NIEA, HPA and FSA, 2012).

2.1 Site activity

The Winfrith site, located near Winfrith Newburgh in Dorset, was established in 1957 as an experimental reactor research and development site. The site has had nine research and development reactors during its lifetime and the last operational reactor closed in 1995. Seven of the reactors have been decommissioned and dismantled with the remaining two reactors in an advanced stage of decommissioning.

Two site operators occupy the Winfrith site; Magnox Limited and Inutec Limited (who trade as Tradebe-Inutec). For the purpose of this habits survey, Magnox Limited and Inutec Limited are considered together as a single site. The Magnox Limited part of the site is owned by the Nuclear Decommissioning Authority (NDA). Magnox Limited operations include decommissioning the remaining reactors. It is anticipated that the interim end state will be achieved by 2023 (NDA, 2019) and the area will be returned to heathland with public access. Inutec Limited provide independent radioactive waste management services. They have occupied the Winfrith site as a tenant since 1996, operating under the Magnox Limited (or its predecessors') nuclear site licence. In February 2019, Inutec Limited was granted a nuclear site licence by the Office for Nuclear Regulation and the Environment Agency. Inutec Limited's operations are expected to continue beyond the delicensing of the Magnox Limited part of the site.

Under EPR 2019, Magnox Limited and Inutec Limited are permitted to undertake radioactive substances activities on the site. This includes permission to discharge gaseous radioactive wastes via stacks to the atmosphere. Magnox Limited discharges liquid wastes into the English Channel via pipelines at Arish Mell. Inutec Limited transports liquid wastes by road to the Tradebe Fawley High Temperature Incineration site, where the wastes are discharged into Southampton Water. The Winfrith site also contains sources of direct radiation. Magnox Limited and Inutec Limited are licensed for the purposes of operating certain activities prescribed under the Nuclear Installations Act, 1965. Details of the amounts of gaseous and liquid radioactive waste discharged are published in the RIFE reports (for example, EA, FSA, FSS, NRW, NIEA and SEPA, 2019).

The current Magnox Limited environmental monitoring programme is expected to be reviewed in 2020. It is anticipated that the Magnox Limited monitoring will change as the site progresses with decommissioning works and Inutec Limited will then develop their own environmental monitoring programme.

2.2 Survey objectives

The Centre for Environment, Fisheries & Aquaculture Science (Cefas) undertook the Winfrith habits survey in 2019 on behalf of the Environment Agency, the Food Standards Agency, and the Office for Nuclear Regulation. The aim of the survey was to obtain comprehensive information on the habits of the public that might lead to their exposure to radiation via gaseous discharges, liquid discharges and direct radiation from the Winfrith nuclear site.

Specifically, investigations were conducted into the following:

- The consumption of food from the aquatic survey area
- Activities and occupancy over intertidal substrates
- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- The use of seaweed as a fertiliser or animal feed
- The consumption of food from the terrestrial survey area
- The use and destination of produce originating from the survey areas
- The consumption and use of groundwater and surface water in the terrestrial survey area
- The transfer of contamination off-site by wildlife
- Activities and occupancy within the direct radiation survey area
- Any new or unusual exposure pathways (e.g. fishing activity adjacent to the Winfrith pipeline outfall), increases in dose relating to Inutec Limited operations (e.g. the liquid waste transfer to the Tradebe Fawley site), and increased quantities of waste on site that could potentially elevate worker dose.

No other additional site-specific investigations were requested for this survey.

2.3 Survey areas

The geographic extents of potential effects from liquid discharges, deposition from gaseous releases, and direct radiation are different. Therefore, different survey areas were defined to cover each of these three main possible sources of exposure. These were an aquatic survey area relating to liquid discharges, a terrestrial survey area relating to atmospheric deposition from gaseous discharges, and a direct radiation survey area relating to ionising radiation emitted directly from the site.

The aquatic survey area (see Figure 1, page 22) covered all tidal waters and intertidal areas from Portland Bill in the west to St Alban's Head in the east and seawater from the coastline to a line drawn between these two headlands. This area was taken to represent the predominant area of mixing of discharged radionuclides in seawater. Fisheries within the East Fleet lagoon were included in the aquatic survey area as seawater from Portland Harbour flows beneath Ferry Bridge into the lagoon.

The terrestrial survey area (see Figure 2, page 23) covered the land within 5 km of the site centre (National Grid Reference: NY 813 869), to encompass the main areas of potential deposition from gaseous discharges.

The direct radiation survey area (see Figure 2, page 23) covered the land within 1 km of the nuclear licensed site boundary. The occupancy data collected from the direct radiation survey area is also applicable to inhalation and external exposure pathways arising from gaseous releases from the site.

The same aquatic and terrestrial survey areas were used in the previous habits survey conducted by Cefas in the Winfrith area, which was in 2003 (McTaggart *et al.*, 2004). The direct radiation survey area had changed since the 2003 survey because part of the eastern side of the site had been delicensed. This resulted in the village of East Burton no longer being included in the direct radiation survey area in 2019.

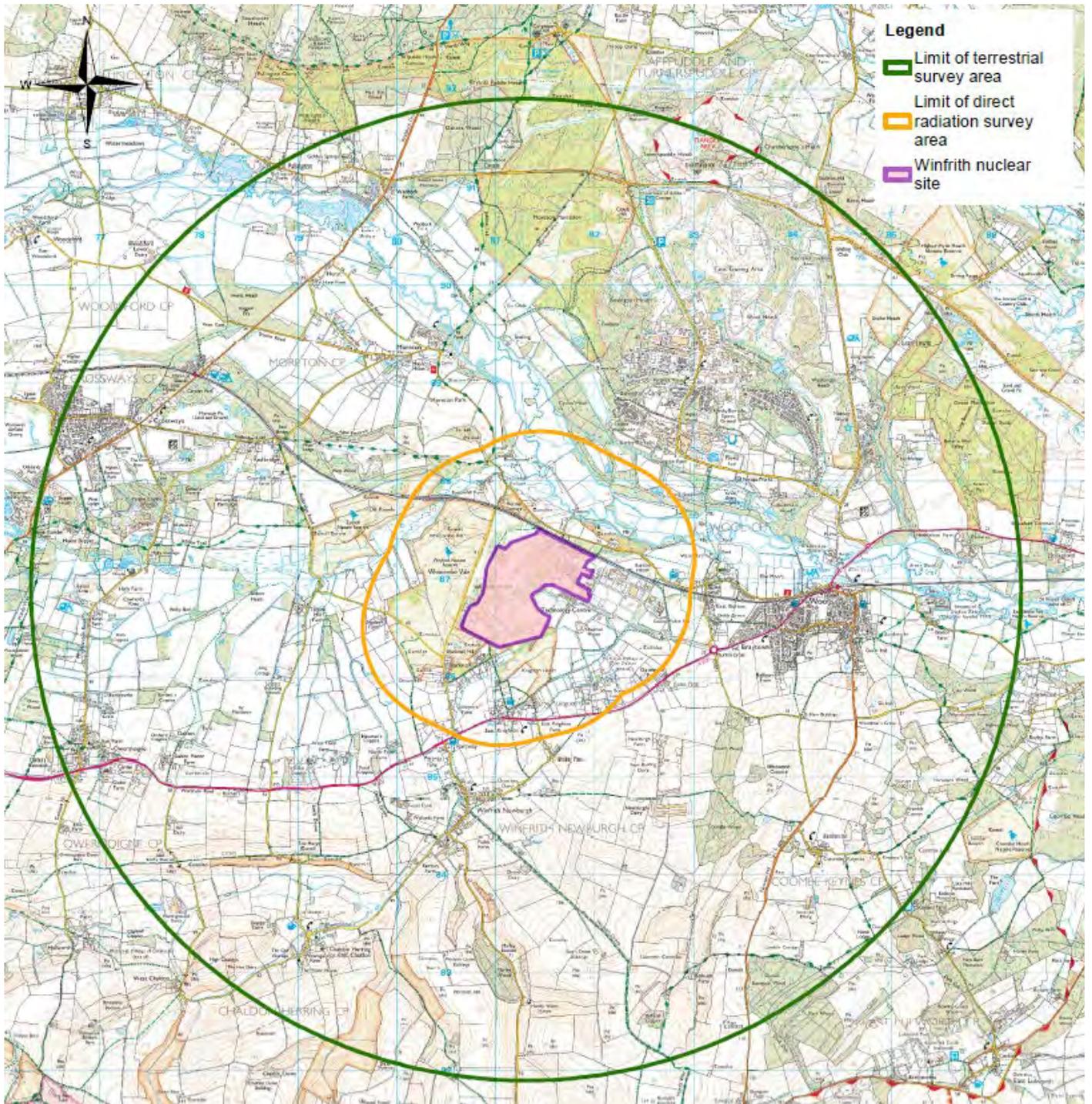


Figure 2. The Winfrith terrestrial and direct radiation survey areas

2.4 Conduct of the survey

As part of the pre-survey preparation, the Environment Agency, the Food Standards Agency and the Office for Nuclear Regulation were contacted to identify any additional site-specific requirements. Information relating to the activities of people in the aquatic and terrestrial survey areas was obtained from Internet searches, Ordnance Survey maps and from previous habits surveys undertaken around the Winfrith nuclear site. People with local knowledge of the survey area were contacted for information relevant to the various exposure pathways. These included beekeeping associations, who provided details about beekeepers within the terrestrial survey area, and the Southern Inshore Fisheries and Conservation Authority (IFCA), who provided information about Marine Protected Areas (MPAs).

A proposed programme for fieldwork was distributed to the EA, the FSA and the ONR before the fieldwork commenced, for their comment. The EA requested that any new pathways or increases in dose relating to Inutec Limited operations were investigated, such as, the liquid waste transfer to Inutec Fawley, and the potential for the elevation of worker dose due to increased quantities of waste on site.

The fieldwork was carried out from the 13th to the 23rd August 2019 using methods consistent with the previous Winfrith habits survey report (McTaggart *et al.*, 2004). During the fieldwork a meeting was held between members of the survey team and representatives from Magnox Limited and Inutec Limited. This discussion provided details about current site activities, local information, potential exposure pathways and activities in the area, and the potential for transfer of contamination off-site by wildlife.

The following information was obtained during the meeting and from further communications after the meeting:

- Since the last habits survey in 2003, part of the Winfrith site has been delicensed. Part of this area is owned by Dorset County Council and has been integrated into the Dorset Innovation Park.
- There are several large businesses on the Winfrith site.
- None of the stacks have been altered since the previous survey in 2003.
- The site pipelines have not been changed since 2003.
- Inutec Limited no longer use the pipelines at Arish Mell to discharge liquid wastes. These liquid wastes are transported through the Magnox Limited site by road to the Tradebe Fawley site (Incineration Waste Treatment Services) where the waste is discharged to either an incinerator or a registered manhole which further discharges to the nearby estuary.
- An entrance to the Dorset Innovation Park is scheduled to be opened to allow the transport of waste through the park in 2020.
- Wildlife control was not routinely undertaken on the Winfrith site because it is located within a designated Site of Special Scientific Interest (SSSI). Reptile fences had been installed on the

Magnox Limited site and there is rodent control in Inutec Limited offices. Deer are observed regularly on the site.

- Inutec Limited were granted planning permission in October 2019 to expand their facilities on site. The proposal outlines an operational development for the construction of a new building including access and areas of hardstanding for the purposes of radioactive waste management.
- It is anticipated that the Magnox Limited site will be fully decommissioned in 2023.

Interviews were conducted with individuals who were identified in the pre-survey preparation and others that were identified during the fieldwork. These included, for example, commercial fishermen, anglers, people spending time on intertidal substrates, farmers, beekeepers and people spending time within the direct radiation survey area. Interviews were used to establish individuals' consumption, occupancy and handling rates relevant to the aquatic, terrestrial and direct radiation survey areas. Any other information of possible use to the survey was also obtained. Gamma dose rate measurements were taken over intertidal substrates in the aquatic area, and indoors and outdoors at most properties in the direct radiation survey area where interviews were conducted. Background gamma dose rates were taken at a distance beyond 5 km from the site centre. All gamma dose rate measurements were taken using multiple Thermo RadEye GX Survey Meters, each connected to a compensated Geiger-Müller tube.

For practical and resource reasons, the survey did not involve the whole population in the vicinity of the Winfrith site. Targeted subsets or groups were chosen in order to identify those individuals potentially most exposed to radiation pathways. However, it is possible that even within a subset or group there may have been people not interviewed during the survey. Therefore, to aid interpretation, the number of people for whom data were obtained in each group has been calculated as a percentage of the estimated complete coverage for that group (where it was possible to make such an estimate). The results are summarised in Table 1. These 'groups' are described and quantified, and the numbers of people for whom data were obtained are given as percentages of the totals. For certain groups, such as anglers, it can be virtually impossible to calculate the total number of people who undertake the activity in the survey area because it is difficult to quantify visitors from outside the area or occasional visitors during the year. Based on UK Office of National Statistics residential data for electoral wards (www.ons.gov.uk) there were approximately 3640 (rounded) people living in the terrestrial survey area, although information was obtained for a significantly smaller number than this. The survey did not include employees or contractors at the nuclear licensed sites whilst at work. This is because dose criteria applicable to nuclear workers and the dose assessment methods are different from those to members of the public. However, data were collected for employees and contractors while outside work if these people were encountered during the survey.

People were initially questioned about their habits relating to the survey area that their first identified activity occurred in and, where possible, they were also asked about their habits relating to the other two survey areas. For example, people in the terrestrial survey were initially questioned because it was

known that they grew or produced significant quantities of terrestrial foodstuffs. However, they were also asked about habits that might lead to exposure to liquid discharges or direct radiation. During interviews with representatives from organisations such as local businesses it was not possible to collect data for all pathways (for example consumption of local foods) for each person. In these cases, the data were limited to those relating to the primary reason for the interview. For example, in the case of a business within the direct radiation survey area, the occupancy rates for the employees.

3.1 Data recording and presentation

Data collected during the fieldwork were recorded in logbooks. On return to the laboratory, the data were examined, and any notably high rates were double-checked, where possible, by way of a follow-up phone call. In cases where follow-up phone calls were not possible (e.g. interviewees who wished to remain anonymous), the data were accepted at face value. The raw data were entered into a data capture application and then uploaded to a habits survey database where each individual for whom information was obtained was given a unique identifier (the Person ID number) to assist in maintaining data quality and traceability.

Where generalised data for groups of people were collected, such as occupancy rates in the direct radiation survey area for employees at businesses, only a limited number of representative individuals were included in the data entered into the database.

The results of the individuals' consumption, occupancy and handling rates collected during the survey were grouped and presented in tables with the high-rate group members indicated in bold and with the calculated mean rates for the high-rate group and 97.5th percentile rates. The consumption rates, occupancy rates and handling rates for all groups are presented in Annex 1 for adults and Annex 2 for children and infants, with the high-rate group members indicated in bold.

If accurate, quantifiable data cannot be obtained from interviews, but pathways are known to exist, it is sometimes necessary to provide estimated habits data for use in dose assessments. In this series of habits survey reports, such data are presented in Annex 3. It was not necessary to estimate data for the 2019 Winfrith survey, but Annex 3 is included in this report to maintain consistency of presentation throughout the series of reports.

3.2 Data conversion

During the interviews, people could not always provide consumption rates in kilograms per year for food or litres per year for milk. In these circumstances, interviewees were asked to provide the information in a different format. For example, some estimated the size and number of items (e.g. eggs) consumed per year, whereas others gave the number of plants in a crop or the length and number of rows in which the crop was grown per year. The habits survey database converts these data into consumption rates (kg y^{-1} for food and l y^{-1} for milk) using a variety of conversion factors. These factors included produce weights (Hessayon, 1990 and 1997; Good Housekeeping, 1994), edible fraction data researched by Cefas, and information supplied by the Meat and Livestock Commission.

3.3 Rounding and grouping of data

The consumption and occupancy data in the text of this report are rounded to two significant figures, except for values less than 1.0, which are rounded to one decimal place. This method of presentation reflects the authors' judgement on the accuracy of the methods used. In the tables and annexes, the consumption rate data are presented to one decimal place. Occasionally, this rounding process causes the computed values (row totals, mean rates and 97.5th percentiles), which are based on un-rounded data, to appear slightly erroneous. Consumption rates less than 0.05 kg y⁻¹ are presented to two decimal places in order to avoid the value of 0.0 kg y⁻¹. External exposure data are quoted as integer numbers of hours per year.

For the purpose of data analysis, foodstuffs were aggregated into food groups as identified in Table 2. Specific food types relevant to this survey are presented in the subsequent tables. The data are structured into groups when it is reasonable to assume that consistent concentrations or dose rates would apply within the group. For example, when considering terrestrial food consumption, all types of root vegetables are grouped together in a food group called root vegetables. Similarly, for aquatic food consumption, all crustacean species are grouped together in the food group crustaceans. For external exposure over intertidal sediments, occupancies over the same substrate (e.g. sand) are grouped together.

Data were structured into age groups because different dose coefficients (i.e. the factors which convert intakes of radioactivity into dose) can apply to different ages. The International Commission on Radiological Protection (ICRP) revised its recommendations for the age groupings to be used in radiological assessments and these recommendations were adopted in the 2010 habits survey reports and thereafter. Consequently, the age ranges used in the habits survey reports prior to 2010 differ from those used currently. The age ranges used in this report and the names used for the age groups, based on the recommendations in ICRP 103 (ICRP, 2007), are shown in Table A below, together with those used in reports prior to 2010, for comparison.

Table A. Names of age groups and range of ages within each age group			
Age ranges used from 2010 onwards		Age ranges used prior to 2010	
Name of age group^a	Age range in group	Name of age group	Age range in group
Infant	0 to 5-year-old	3-month-old	Under 1-year-old
		1-year-old	1-year-old
		5-year-old	2-year-old to 6-year-old
Child	6-year-old to 15-year-old	10-year-old	7-year-old to 11-year-old
		15-year-old	12-year-old to 16-year-old
Adult	16-year-old and over	Adult	17-year-old and over

^a In the 2010 reports only, the infant age group was called the 1-year-old age group and the child age group was called the 10-year-old age group.

Since there are fewer age groups for children in the current regime, there should, in general, be more observations in each group, resulting in greater robustness in the data. However, data since 2010 will not be directly comparable with data prior to 2010, since the age ranges in the age groups will be different.

For direct radiation pathways, the data were grouped into distance zones from the nuclear site boundary as a coarse indication of the potential dose rate distribution due to this source of exposure. The bands used in this report were: 0 - 0.25 km; >0.25 - 0.5 km; >0.5 - 1.0 km. These distance bands are also useful for assessing exposure to gaseous discharges.

3.4 Approaches for the identification of high rates

The habits data have been analysed to identify high rates of consumption, occupancy and handling, which are suitable for use in radiological assessments. Two approaches have been used:

Firstly, the 'cut-off' method was used as described by Hunt *et al.* (1982). With the 'cut-off' method, the appropriate high rate was calculated by taking the arithmetic mean of the values between the maximum observed rate and one third of the maximum observed rate. In this report, the term 'high-rate group' is used to represent the individuals derived by the 'cut-off' method. The mean of the high-rate group was calculated for each food group, intertidal substrate and handling pathway identified in the survey. In certain cases, using the 'cut-off' method resulted in only one person being in the high-rate group. In these cases, expert judgement was used to decide whether the high-rate group should remain as one individual or whether others should be included. If others were included, the second highest rate was divided by three and all observations above this secondary 'cut-off' were included in the high-rate group.

Secondly, the 97.5th percentile rate was calculated for each group. The use of percentiles accords with precedents used in risk assessments of the safety of food consumption. It should be noted that the interviewees in this study are often selected and, therefore, the calculated percentiles are not based on random data.

Mean and 97.5th percentile consumption rates for adults, based on national statistics, are provided as a baseline for comparison with the observed rates. The rates based on national statistics are referred to as generic rates in this report and have been taken from Byrom *et al.*, 1995.

The mean rates for the high-rate groups for children and infants for consumption, intertidal occupancy and handling pathways, have been calculated. However, in cases where few child or infant observations were identified, an alternative approach that may be used for assessments is to estimate the mean rates for the high-rate groups for children and infants by applying scaling ratios to the mean rates for the high-rate groups for adults. Ratios for this purpose for the consumption and intertidal

occupancy pathways, based on generic 97.5th percentile rates, are provided in Annex 4. The age ranges within the age groups in Annex 4 do not correspond exactly with the age ranges within the age groups used throughout the rest of this report, but these ratios are the best available data for estimating child rates and infant rates from adult rates. Adult to child and adult to infant ratios are not available for handling pathways.

For use in assessments of prenatal child dose, consumption and occupancy rates are provided in Annex 5 for women of childbearing age. The age range used in this report for women of childbearing age is 15 – 44 years old, which is based on the classification used by the Office of National Statistics (www.ons.gov.uk).

For the direct radiation pathway, mean occupancy rates and 97.5th percentile rates have not been calculated. Such an analysis is of limited value without a detailed knowledge of the spatial extent of dose rates due to direct radiation.

3.5 Profiles of habits survey data for use in *total dose* assessments

The survey data have been analysed to produce profiles of consumption and occupancy rates according to the method described by Camplin *et al.*, 2005. The profiles for adults are used to assess *total dose* integrated across all pathways of exposure in the RIFE reports (e.g. EA, FSA, FSS, NRW, NIEA, and SEPA, 2019).

Matrices of profiles for adults, children, infants and women of childbearing age are presented in Annexes 6 to 9 respectively. Within each matrix the means for the high-rate groups, as determined by the 'cut-off' method, are presented on the diagonal. Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile. For the direct radiation pathway, the figure denotes the proportion of the individuals within that profile who spend time within the direct radiation survey area.

3.6 Data quality

To ensure the quality of the data collected during the survey fieldwork and presented in the report, the following procedures have been employed:

- Experienced scientific staff were used for the fieldwork and data analysis. They had been trained in the techniques of interviewing and obtaining data for all pathways that were relevant to the survey being conducted. Where individuals offered information during interview that was considered unusual, they were questioned further in order to double-check the validity of their claims.
- Where possible, interviewees were contacted again to confirm the results of the initial interview if, when final consumption or occupancy rates were calculated, observations were found to be

high in relation to our experience of other surveys. Local factors were taken into account in these cases.

- Data were processed in a purpose-built habits survey database using a consistent set of conversion factors.
- Data were stored in a database in order to minimise transcription and other errors.
- Draft reports were reviewed by the EA, the FSA and the ONR.
- Final reports were only issued when the EA, the FSA and the ONR were entirely satisfied with the format and content of the draft report.

4.1 Aquatic survey area

The aquatic survey area (shown in Figure 1, page 22) covered all tidal waters and intertidal areas from Portland Bill in the west to St Alban's Head in the east, and seawater from the coastline to a line drawn between these two points. Fisheries in the East Fleet lagoon were included because the tidal waters from Portland Harbour flow beneath Ferry Bridge into the lagoon.

The aquatic survey area is part of the Jurassic Coast, which is a World Heritage Site due to its unique geology. The coastline throughout the survey area is dominated by steep cliffs that are largely inaccessible. In the western part of the survey area there are sandy beaches around Weymouth Bay and in the eastern part of the survey area there are several bays and coves which attract a large number of visitors. The aquatic survey area is described in detail below from west to east.

Isle of Portland and Portland Harbour

The shore along the western end of the survey area on the Isle of Portland between Portland Bill and Balaclava Bay is predominately rocky and inaccessible. Access to the shore is possible at Portland Bill (see Figure 3, below) where footpaths lead to the cliff edge. Angling from the rocks was identified and various species of edible seaweed were collected from the shore for consumption.



Figure 3. Portland Bill

Portland Harbour (see Figure 1, page 22) is one of the largest harbours in the world with four breakwater arms that enclose approximately 520 hectares of water. The harbour stretches from Balaclava Bay (on the Isle of Portland) to Castle Cove (near Weymouth) and contains a private marina with moorings for pleasure motorboats and charter boats, an industrial marina used for ship building, and Portland Port, which can accommodate cruise liners, tankers and cargo ships. Several watersports organisations were based within Portland Harbour and offered lessons for sub-aqua diving, sailing, powerboating, windsurfing, paddleboarding and kitesurfing. Several wrecks located within the harbour were used as dive sites all year round due to the calm conditions. A seaweed farm was identified in Portland Harbour and shellfish farm trials are being considered. There are two very small sand and stone beaches in Castletown with slipways for launching small boats. A causeway links the Isle of Portland to Weymouth (see Figure 4, below).



Figure 4. Isle of Portland looking towards Ferry Bridge and Weymouth

At the Weymouth end of the causeway, seawater flows under Ferry Bridge (see Figure 5, page 34) into East Fleet lagoon. The shore around Ferry Bridge was popular with families playing, as well as people undertaking kitesurfing and windsurfing offshore. A boatyard and a slipway are located close to the bridge and commercial fishing boats were anchored offshore. Two individuals were spear fishing offshore of Ferry Bridge and Castletown as well as collecting mussels from Ferry Bridge.

Castle Cove, which is located towards the north-west of Portland Harbour, has two small beaches, a boat club and a sailing club. The sandy beaches are backed by sea defences and have rocks at either end. During the survey, individuals were identified angling from the rocks and families were playing on the beach.



Figure 5. Ferry Bridge with East Fleet lagoon in the background

Weymouth, Greenhill, Lodmoor and Bowleaze Cove

Weymouth Harbour (see Figure 6 below) has moorings along two quays from the outer piers to Town Bridge. A range of boats were moored in the harbour during the survey, including commercial fishing vessels, angling charter boats, a commercial ferry, charter pleasure cruisers, rigid inflatable boats and visiting private boats (see Figure 7, page 35). A privately-owned marina and a council-owned marina are located beyond Town Bridge, both marinas provide moorings for a variety of pleasure motorboats and angling boats.

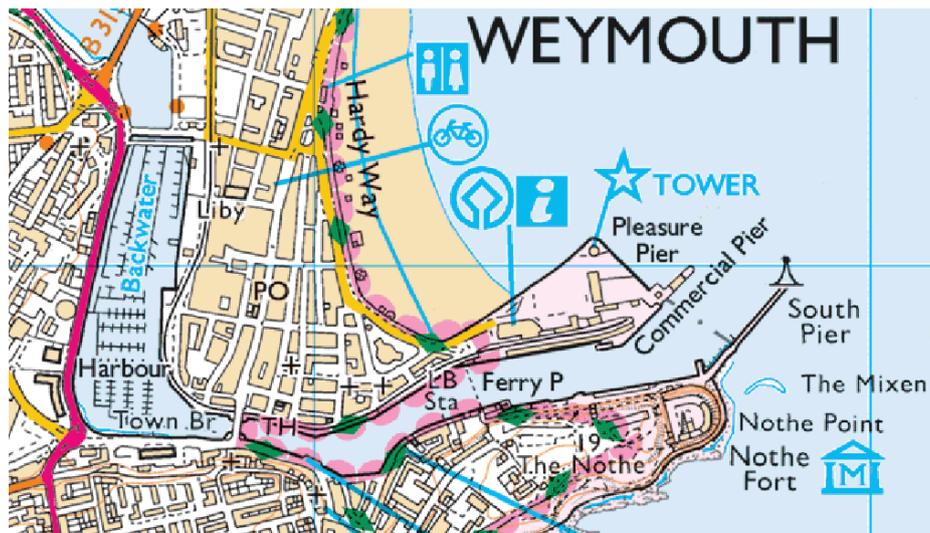


Figure 6. Map of Weymouth Harbour



Figure 7. Weymouth Harbour

North of Weymouth Harbour, there is a continuous stretch of beach around Weymouth Bay, which includes Weymouth, Greenhill, Lodmoor and Bowleaze Cove. The beach at Weymouth (see Figure 8, below) is adjacent to the town and has easy access. The sand and stones beach was very popular with holiday makers. Activities included lifeguard duties, walking, playing, watersports and swimming. Pedalos and beach huts were available for hire. Edible seaweed was collected for consumption from the shore at Weymouth by two individuals.



Figure 8. Weymouth beach

Lifeguards were patrolling the beach from Weymouth to Greenhill. Greenhill beach was backed by a concrete promenade where many people were observed walking. Members of a local swimming club regularly swam in the sea at Greenhill. Bowleaze Cove was popular with tourists and had multiple caravan sites nearby. Dog walking was popular between Lodmoor and Bowleaze Cove and many individuals spent time walking and sitting on these beaches.

Osmington Mills and Ringstead Bay

The shore at Osmington Mills is a mixture of sand, stones, boulders and rocks, which is backed by cliffs (see Figure 9, below). There is public access to the beach via a coastal path which runs along the cliffs. People were observed walking along the beach. An outdoor activity centre with a private beach is based near Osmington Mills.



Figure 9. Osmington Mills beach

Ringstead is located to the east of Osmington Mills and comprises several small bays backed by cliffs (see Figure 10, below). There is a large car park within a short distance of the stone beach and a caravan park close to the shore. Activities taking place at Ringstead Bay included dog walking, walking, sitting on the beach, swimming and paddling.



Figure 10. Ringstead beach

Lulworth Cove

Lulworth Cove is a very popular tourist destination that attracts thousands of visitors per year. There is a large car park just outside Lulworth Village and a road that leads through the village to the shore. Lulworth Cove is a large horseshoe shaped bay that is backed by cliffs and has a sand and stones shore (see Figure 11, below). During the survey, a variety of activities were taking place, including sitting on the beach, playing, swimming, paddling, kayaking and bodyboarding. One yacht, one rigid inflatable boat and two rowing boats were observed moored in the cove. The sheltered cove has calm waters which provide ideal conditions for coasteering (scrambling up the cliffs and jumping into the sea) and guided sessions were offered in the summer months. Edible seaweed was collected for consumption by three individuals from the shore at Lulworth Cove.



Figure 11. Lulworth Cove

Worbarrow Bay, Kimmeridge Bay and Chapman's Pool

The MOD Lulworth Ranges cover a large area of land from the eastern side of Lulworth Cove to the west of Kimmeridge Bay. Access through the ranges to the shore is restricted through the year; however, they are open to the public at selected weekends and over the Christmas period. The ranges also include a sea danger area, which extends up to six nautical miles offshore between Lulworth Cove and St Albans Head. Activities in the sea danger area were restricted when firing was taking place.

Worbarrow Bay has a large sand and stone beach which is backed by steep cliffs. The beach can only be reached by road through the MOD Lulworth Ranges, then by parking at Tyneham and walking approximately 1 km. During the survey, people were identified walking on the shore at Worbarrow Bay and there were a handful of tourists visiting for the first time.

A toll road leads to the cliff top at Kimmeridge Bay where there is a car park and an access road to a slipway. Close to the slipway there is a small parking area where several rowing boats and an angling boat were observed. The shore comprises areas of shelving rock, shale, boulders and stones (see Figure 12, below) with areas of sand and stones. A sea life centre was located near the shore and provided information about the marine environment as well as providing a snorkel trail and offering guided walks with rock pooling. The bay is very popular with tourists and local people who were sitting on the shore, walking, collecting fossils (by hammering the cliff), rock pooling, swimming and paddling. Two individuals were identified collecting small quantities of winkles from the boulders at Kimmeridge Bay. Between Kimmeridge Bay and St Alban's Head at the eastern end of the survey area, there was only footpath access to the shore.



Figure 12. Kimmeridge Bay

4.2 Commercial fisheries

The commercial fishermen in the survey area mainly targeted brown crab, common lobster, whelks, scallops, and fish species including plaice, bass, skate, cod and bream. Small quantities of common prawns and small black crabs were also caught. Approximately 30 commercial fishing vessels were mainly based in Weymouth Harbour, a few of which were based in Portland Harbour. These vessels were primarily potting, rod and line fishing (sustainable bass fishery) and netting. One trawler was operating in the survey area. Several small commercial potting and netting vessels were active in the survey area.

There is a Marine Conservation Zone (MCZ) (Purbeck Coast) from Swanage Bay to Ringstead Bay and a Special Area of Conservation (SAC) (Studland to Portland) within the survey area. Approximately 75% of the survey area falls within the MCZ and SAC. No bottom towed fishing gear could be deployed

in these areas due to local byelaws, but this type of fishing gear could be used in approximately 25% of the survey area.

The Winfrith pipeline outfalls are located within The Lulworth Ranges Sea Danger Area. During periods of firing, fishermen are advised to avoid this area for their own safety, but they can fish in this area when firing is not taking place. A one-off incident occurred where one of the Winfrith twin pipelines had moved along the seabed and over the second twin pipeline. It was thought that a snagged fishing net had caused the pipeline to move, but no nets were found or recovered.

4.3 Destination of seafood originating from the aquatic survey area

The majority of fish, scallops, brown crabs, common lobsters and common prawns were sold through fish merchants in Weymouth, sent to Brixham Market or sold to restaurants, pubs and hotels. Whelks landed at Weymouth and Portland were sold in London, at fish merchants in Weymouth and to wholesalers for export to South Korea.

4.4 Angling and non-commercial shellfish collection

Boat angling was very popular throughout the survey area with numerous charter boats and pleasure cruisers based at Weymouth and Portland harbours. Shore angling was identified at Portland Bill, Bowleaze Cove and Kimmeridge Bay. The main edible species caught by anglers were bass and mackerel.

Two individuals were identified spear fishing and collecting mussels in the water at Castletown and Ferry Bridge.

Many sub-aqua divers were identified collecting and consuming large quantities of scallops from throughout the survey area, including Lulworth Banks. Two people were identified consuming small quantities of winkles from Kimmeridge Bay.

4.5 Wildfowling

No wildfowling was identified during the survey.

4.6 Other pathways

Seaweed was collected throughout the survey area on a small industrial scale to produce liquid fertiliser which was sold commercially. Foraging for wild foods was popular on the shoreline and some businesses offered foraging day courses for members of the public.

4.7 Food consumption data

Consumption data for aquatic foods are presented in Tables 3 to 6 for adults and in Tables 7 to 10 for children and infants. The mean consumption rates for the high-rate groups and the observed 97.5th percentile rates, calculated as described in Section 3.4, are given at the foot of each table.

Adults' consumption rates

The people consuming the greatest quantities of food from the aquatic survey area were commercial fishermen, anglers and the families and friends of these groups of people.

Table B (see below) presents a summary of the adults' consumption rates for the following food groups: fish; crustaceans; molluscs; marine plants/algae. The table includes the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. For comparison, the table also includes mean consumption rates and 97.5th percentile consumption rates for fish, crustaceans and molluscs based on national data, which are referred to as 'generic' data in this report (Byrom *et al.*, 1995). No generic consumption rates are available for marine plants/algae.

Table B. Summary of adults' consumption rates of foods from the aquatic survey area

Food group	Number of observations	Number of high-rate consumers	Observed maximum for the high-rate group (kg y ⁻¹)	Observed minimum for the high-rate group (kg y ⁻¹)	Observed mean for the high-rate group (kg y ⁻¹)	Observed 97.5 th percentile (kg y ⁻¹)	Generic mean* (kg y ⁻¹)	Generic 97.5 th percentile* (kg y ⁻¹)
Fish	71	41	32.4	10.9	20.6	32.4	15.0	40.0
Crustaceans	53	5	25.6	19.1	20.4	19.1	3.5	10.0
Molluscs	50	4	18.9	18.0	18.6	18.9	3.5	10.0
Marine plants/algae	7	2	3.9	3.9	3.9	3.9	Not determined	Not determined

(*Generic rates based on data from Byrom *et al.*, 1995.)

The predominant species of fish consumed by adults were mackerel and bass, with smaller quantities of bream, brill, cod, Dover sole, grey gurnard, grey mullet, ling, monkfish, plaice, pollack, red gurnard, thornback ray, turbot and whiting. The fish were caught throughout the aquatic survey area. Of the fish consumed by the 41 people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 20% mackerel, 20% bass, 10% plaice, 10% pollack, 10% turbot and a 30% mix of brill, bream, cod, Dover sole, grey gurnard, grey mullet, monkfish, thornback ray and whiting. No ling or red gurnard were consumed by the members of the high-rate group.

The main species of crustaceans consumed by adults were common lobster and brown crab, with smaller quantities of spiny spider crab and common prawn. The common lobster and brown crab were

caught using pots in Weymouth Bay, Ringstead Bay, Lulworth Banks, around the outfall at Arish Mell and Kimmeridge Bay. Spider crab were caught using pots deployed within the survey area. The common prawns were commercially netted throughout the survey area. Of the crustaceans consumed by the five people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 75% common lobster and 25% brown crab.

The main species of molluscs consumed by adults were scallops, whelks and razor shells, with smaller quantities of mussels, cockles, Pacific oysters and winkles. The scallops were hand dived from Lulworth Banks and throughout the survey area. Commercial vessels were potting for whelks throughout the survey area. The mussels were collected from Ferry Bridge and Portland Harbour. Razor shells and cockles were collected throughout the survey area and Pacific oysters were collected in East Fleet. Of the molluscs consumed by the four people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 55% scallop, 30% razor shell, 15% whelk, 5% cockles and 5% Pacific oyster (this does not total 100% due to rounding).

The main species of marine plants/algae consumed by adults were sea spaghetti, sea beet and sugar kelp, with smaller quantities of bladder wrack, dulse and sea lettuce. The sea spaghetti, sea lettuce and bladder wrack were collected from the rocky shore at Portland Bill. The sugar kelp was collected in Portland Harbour and from the shore at Weymouth Bay and Lulworth Cove. The sea beet was collected from across Weymouth Bay and Lulworth Cove. The dulse was collected from Lulworth Cove. Of the marine plants/algae consumed by the two people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 40% sea spaghetti, 35% sea beet, 15% bladder wrack and 15% sugar kelp (this does not total 100% due to rounding).

Children's and infants' consumption rates

Table C (see page 42) presents a summary of children's and infants' consumption rates of fish, crustaceans, molluscs and marine plants/algae. No children were identified consuming molluscs or marine plants/algae. The table includes the mean consumption rates for the high-rate group and the observed 97.5th percentile rates. No generic rates have been determined for the child or infant age groups.

Table C. Summary of children's and infants' consumption rates of foods from the aquatic survey area

Food group	Number of observations	Number of high-rate consumers	Observed maximum for the high-rate group (kg y ⁻¹)	Observed minimum for the high-rate group (kg y ⁻¹)	Observed mean for the high-rate group (kg y ⁻¹)	Observed 97.5 th percentile (kg y ⁻¹)
Child age group (6 – 15 years old)						
Fish	3	3	32.4	24.3	29.7	32.4
Crustaceans	3	3	3.1	2.4	2.9	3.1
Infant age group (0 – 5 years old)						
Fish	4	2	10.7	5.4	8.1	10.3
Crustaceans	2	1	9.6	9.6	9.6	9.3
Molluscs	1	1	9.4	9.4	9.4	Not applicable
Marine plants/algae	1	1	0.1	0.1	0.1	Not applicable

The species of fish consumed by the individuals in the child age group were pollack, mackerel and bass, with smaller quantities of monkfish and cod. The species of fish consumed by the individuals in the infant age group were mackerel, pollack and bass, with smaller quantities of thornback ray, grey mullet, monkfish and cod.

The species of crustaceans consumed by individuals in the child age group was brown crab, with smaller quantities of common prawn. The species of crustaceans consumed by the individuals in the infant age group were common lobster and brown crab, with smaller quantities of common prawn.

The species of molluscs consumed by individuals in the infant age group were scallop, razor shell and whelk, with smaller quantities of cockle and Pacific oyster.

The only species of marine plants/algae consumed by individuals in the infant age group was sugar kelp.

4.8 Intertidal occupancy

Intertidal occupancy rates for adults are presented in Table 11 and intertidal occupancy rates for children are presented in Table 12. There were no infants identified spending time on intertidal areas. It should be noted that there is often more than one substrate at one named location and that substrates at a given location are prone to change over time. Activities were assigned to the predominant substrate over which they were taking place.

Adults' intertidal occupancy rates

Table D (see below) presents a summary of the adults' intertidal occupancy rates in the aquatic survey area. The table includes the mean occupancy rates for the high-rate groups and the observed 97.5th percentile rates.

Table D. Summary of adults' intertidal occupancy rates					
Intertidal substrate	Number of observations	Number of people in the high-rate group	Maximum of the high-rate group (h y⁻¹)	Mean of the high-rate group (h y⁻¹)	97.5th percentile (h y⁻¹)
Rock	27	12	84	55	68
Sand	35	11	387	387	387
Sand and stones	75	17	1038	562	1038
Stones	39	5	1038	713	1038

The activities undertaken by people in the adult high-rate groups for occupancy over each of the intertidal substrates were:

- For rock: angling at Portland Bill, Castle Cove and Kimmeridge Bay; coastering instructing at Lulworth Cove.
- For sand: working on the shore at Weymouth.
- For sand and stones: lifeguard duties and working on the shore at Weymouth; dog walking at Castletown; angling at Bowleaze Cove.
- For stones: lifeguard duties, dog walking and walking at Greenhill and Lodmoor.

Children's and infants' intertidal occupancy rates

Table E (see page 44) presents a summary of the children's and infants' intertidal occupancy rates in the aquatic survey area. The table includes the mean occupancy rates for the high-rate groups and the observed 97.5th percentile rates. There were no intertidal activities identified for individuals in the infant age group.

Table E. Summary of children's and infants' intertidal occupancy rates					
Intertidal substrate	Number of observations	Number of people in the high-rate group	Maximum of the high-rate group (h y⁻¹)	Mean of the high-rate group (h y⁻¹)	97.5th percentile (h y⁻¹)
Child age group (6 – 15 years old)					
Sand	17	1	213	213	139
Sand and stones	1	1	213	213	Not applicable
Stones	2	2	74	74	74
Infant age group (0 – 5 years old)					
No observations for infants					

The activities undertaken by individuals in the child age group high-rate groups for occupancy over each of the intertidal substrates were:

- For sand: working on the shore (in summer) at Weymouth.
- For sand and stones: working on the shore (in summer) at Weymouth.
- For stones: playing and sitting on the beach at Greenhill and Lodmoor.

4.9 Gamma dose rate measurements

Gamma dose rate measurements were taken over two intertidal substrates. All measurements were taken at a height of 1 metre above the substrate. The results are presented in Table 13 and are summarised in Table F (see below).

Table F. Summary of gamma dose rate measurements taken over intertidal substrates			
Substrate	Number of measurements taken	Minimum gamma dose rate at 1 metre^a (μGy h⁻¹)	Maximum gamma dose rate at 1 metre^a (μGy h⁻¹)
Sand and stones	6	0.058	0.068
Stones	2	0.056	0.056

Notes

^a These measurements have not been adjusted for background dose rates.

For comparison, natural background rates have been estimated at 0.05 μGy h⁻¹ over sandy substrates, 0.07 μGy h⁻¹ over mud and over salt marsh, and 0.06 μGy h⁻¹ over other substrates (EA, FSA, FSS, NRW, NIEA and SEPA, 2019).

4.10 Handling of fishing gear and sediment

Handling fishing gear that has become entrained with fine sediment particles, or handling sediment while undertaking activities such as bait digging or mollusc collecting, can potentially give rise to skin exposure from beta radiation. Doses to the skin are considered within the dose limitation system (ICRP, 1992).

Fishing gear can also be a source of gamma exposure due to occupancy in the vicinity of the gear. However, this pathway is minor compared with the exposure received during occupancy over intertidal areas and it has therefore been omitted from the report. Handling of angling equipment was not considered to be a significant pathway. Therefore, as in previous surveys, data for this pathway were not collected.

Handling rates of fishing gear and sediment for adults are presented in Table 14. No children or infants were identified handling sediment or fishing gear.

Adults' handling rates of fishing gear and sediment

Table G (see below) presents a summary of the handling rates of fishing gear and sediment for adults. The table includes the mean handling rates for the high-rate groups and the observed 97.5th percentile rates.

Table G. Summary of adults' handling rates of fishing gear and sediment					
Handling activity	Number of observations	Number of people in the high-rate group	Maximum of the high-rate group (h y⁻¹)	Mean of the high-rate group (h y⁻¹)	97.5th percentile (h y⁻¹)
Handling fishing gear	11	3	1278	1278	1278
Handling sediment	2	2	5	5	5

The activities undertaken by people in the adult high-rate groups for handling included:

- For handling fishing gear: handling pots and nets throughout the survey area.
- For handling sediment: collecting winkles at Kimmeridge Bay.

4.11 Water activities

Activities taking place in or on water can lead to ingestion of water and/or inhalation of spray. These pathways are generally considered to be of minor radiological importance in comparison with other exposure pathways such as the consumption of foods produced in the vicinity of a nuclear site. However, relevant data have been collected for consideration in dose assessments. Mean occupancy rates have not been calculated for the high-rate groups and 97.5th percentile rates.

Activities involving a high likelihood of an individual's face submerging under water have been classified as activities 'in water', as they are more likely to lead to ingestion of water. All other water activities have been classified as activities 'on water'.

Occupancy rates for activities taking place 'in water' and 'on water' activities in the aquatic survey area are presented in Table 15 for adults and Table 16 for children. There were no occupancy rates in and on water identified for individuals in the infant age group. Where generic data for groups of people were collected, for example members of sailing clubs, only representative examples have been included in the data presented.

Activities in water

The activities identified taking place in water in the aquatic survey area were kayaking, paddleboarding, kitesurfing, windsurfing, swimming, surfing, snorkelling, jet skiing, spear fishing, collecting mussels (whilst swimming), sub-aqua diving and collecting scallops whilst diving. Kayaking is classified as an 'in water' activity since it is likely to lead to the ingestion of seawater. One hundred and sixty-two observations were recorded for adults, 16 observations were recorded for the child age group and no observations were recorded for the infant age group. The highest occupancy rate for an adult was 840 h y⁻¹ for an individual who was teaching water sports at Portland Harbour and Ferry Bridge. The highest occupancy rate for the child age group was 120 h y⁻¹ for two children who were paddleboarding and swimming at Greenhill and Lodmoor.

Activities on water

The activities taking place on water in the aquatic survey area were sailing, commercial fishing (including gill netting, trawling, potting, and rod and line), boat angling, rescue duties, travelling to a dive site, charter boat duties, rowing, powerboat instructing, working on pontoons, being on a boat, ferry duties, working on a boat, paddling, boat maintenance and collecting a small quantity of mussels. For adults, 210 observations were recorded, for the child age group 25 observations were recorded and for the infant age group no observations were recorded. The highest occupancy rate for adults was 2500 h y⁻¹ for four crew members who were commercial fishing (rod and line) throughout the survey area. The highest occupancy rate for the child age group was 290 h y⁻¹ for one child who was working on a boat (in the summer) in Weymouth Bay.

5.1 Terrestrial survey area

The terrestrial survey area (see Figure 2, page 22) covered the land and freshwater watercourses within 5 km of the site centre (National Grid Reference: SY 813 869).

The land in the terrestrial survey area is predominantly agricultural and is largely owned by several private estates. Several villages and a town were located within the terrestrial survey area including Winfrith Newburgh to the south, Wool to the east, Moreton to the north and Owermoigne to the west. The River Frome flows from the north-west to the east of the terrestrial area through several of the private estates.

Thirty-five working farms and three smallholdings were identified in the Winfrith terrestrial survey area. Of these farms and smallholdings:

- Eleven farms produced milk (from dairy cattle), dairy followers (young dairy cattle, intended to replace older dairy cattle) or dry dairy cows (waiting to calf)
- Six farms produced beef cattle (for fattening or stores), one of which also produced geese and turkeys
- Six farms produced beef cattle and lambs
- One farm produced lambs
- Six farms produced arable crops for animal feed or stored animal feed.
- Four farms produced salad crops and one produced watercress
- Two smallholdings produced pigs, lambs and chicken eggs, and one produced lambs

The production of arable crops for human consumption was not identified. Many of the livestock farms produced animal feed. Grass (for silage), wheat, barley, oats, beans and maize were grown for use as animal feed on the farms where they were produced or were bought from other farms within the survey area. Farmers, smallholders and their families were consuming milk, beef, lamb, watercress, pork, chicken eggs, goose and turkey produced commercially on their own farms or smallholdings.

A wide variety of fruit and vegetables were grown in private gardens within the survey area. No seaweed was used as a fertiliser on fruit and vegetables in these gardens. One allotment site with approximately 50 individual plots was located within the survey area, however access was not permitted to the survey team.

Four beekeepers were identified with a total of 25 mature hives in the survey area. Seventeen hives and were located in the north-eastern part of the survey area, four hives were located to the south of

the survey area, and four hives were located to the east of the survey area. The average production of honey per hive ranged from 2.5 kg y⁻¹ to 12.5 kg y⁻¹. The honey was consumed by the beekeepers, their families and friends, and sold from a shop.

Wild foods that were collected from within the survey area and consumed were blackberries, chestnuts, damsons, elderberries, elderflowers, hawthorn fruit, hazelnuts, rosehips, sloes and mushrooms. One organised shoot targeting wild pheasants and partridges was recorded, and shooting was also identified on other areas of the farmland. Partridge, pheasant, pigeon, rabbit and venison were shot and consumed.

Human consumption of groundwater via boreholes was identified at several farmhouses. Livestock were identified drinking mains water and had access to spring, stream water and water from a borehole.

The soil classification at farms where interviews were conducted in the terrestrial survey area included sandy loam, light loam, chalk, and clay loam.

5.2 Destination of food originating from the terrestrial survey area

The destination of foods produced in the survey area included the following:

- Milk was sold to a dairy co-operative.
- Lambs were sold to a food processing company, lamb was sold at a farm shop, to hotels and to a national supermarket chain.
- Beef cattle were sold at a range of livestock markets in Dorset, to an abattoir in Cornwall, and to a food processing company. Beef was sold at a farm shop, national supermarket chains, and restaurants and public houses in Dorset, Wiltshire and Hampshire.
- Pork was sold at a farm shop.
- Chicken eggs were sold from a farm shop.
- Honey was sold from the door, given away to friends and family and sold at a shop.
- Venison and pheasant were sold to a butcher shop.

5.3 The potential transfer of contamination off-site by wildlife

The potential transfer of contamination off-site by wildlife was investigated as radionuclides could enter the food chain or contaminate the environment through this pathway. Only a small amount of routine pest control was undertaken on site because the area is a designated Site of Special Scientific Interest (SSSI). Reptile fences had been installed on the Magnox Limited site and there was rodent control in Inutec Limited welfare areas and offices. Deer are seen regularly on both sites.

5.4 Food consumption data

Consumption data for locally produced foodstuffs potentially affected by deposition of gaseous discharges are presented in Tables 17 to 33 for adults and Tables 34 to 48 for children and infants. The mean consumption rates for the high-rate groups and the observed 97.5th percentile rates, calculated as described in Section 3.4, are given at the foot of each table.

In order to provide information relevant to monitoring and assessments studies, the consumption rate data collected during the survey were analysed to indicate the percentage that each food type contributed to each food group. The data are summarised in Table 49.

Adults' consumption rates

Consumption of locally produced foods was identified in the following 17 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; poultry; eggs; wild/free foods; rabbits/hares; honey; wild fungi; venison; freshwater plants. No consumption of freshwater fish was identified.

Table H (see page 50) presents a summary of the adults' consumption rates for the foods consumed from the terrestrial survey area. The table includes the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. For comparison, the table also includes mean consumption rates and 97.5th percentile consumption rates based on national data, which are referred to as 'generic' data in this report.

Table H. Summary of adults' consumption rates of foods from the terrestrial survey area

Food group	Number of observations	Number of high-rate consumers	Observed maximum for the high-rate group (kg y ⁻¹ or l ⁻¹)	Observed minimum for the high-rate group (kg y ⁻¹ or l ⁻¹)	Observed mean for the high-rate group (kg y ⁻¹ or l ⁻¹)	Observed 97.5 th percentile (kg y ⁻¹ or l ⁻¹)	Generic mean* (kg y ⁻¹ or l ⁻¹)	Generic 97.5 th percentile* (kg y ⁻¹ or l ⁻¹)
Green vegetables	52	16	30.4	11.0	17.7	28.5	15.0	45.0
Other vegetables	67	14	47.9	25.0	37.4	55.0	20.0	50.0
Root vegetables	55	6	28.7	18.2	22.8	26.2	10.0	40.0
Potato	35	16	54.6	18.8	30.9	54.6	50.0	120.0
Domestic fruit	63	14	21.8	8.0	13.0	18.8	20.0	75.0
Milk	6	4	82.0	82.0	82.0	82.0	95.0	240.0
Cattle meat	22	6	47.3	39.2	41.9	47.3	15.0	45.0
Pig meat	15	11	10.4	3.9	8.0	10.4	15.0	40.0
Sheep meat	19	4	47.5	33.9	40.7	47.5	8.0	25.0
Poultry	17	2	12.9	12.9	12.9	12.9	10.0	30.0
Eggs	50	10	52.0	17.8	25.9	45.0	8.5	25.0
Wild/free foods	60	19	4.2	1.7	3.2	4.1	7.0	25.0
Rabbits/hares	4	2	2.2	2.2	2.2	2.2	6.0	15.0
Honey	43	16	4.3	1.8	2.8	4.3	2.5	9.5
Wild fungi	18	14	0.7	0.3	0.5	0.7	3.0	10.0
Venison	11	8	5.4	3.8	4.6	5.4	Not determined	Not determined
Freshwater plants	16	2	10.4	10.4	10.4	10.4	Not determined	Not determined

(*Generic rates based on data from Byrom *et al.*, 1995.)

The observed mean consumption rate for the high-rate group was greater than the generic 97.5th percentile consumption rate for sheep meat and eggs. Eight of the observed mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for: green vegetables; other vegetables; root vegetables; cattle meat; sheep meat; poultry; eggs; honey. Four of the observed 97.5th percentile consumption rates exceeded the generic 97.5th percentile consumption rates, which were for other vegetables: cattle meat; sheep meat; eggs.

Children's and infants' consumption rates

Seven individuals in the child age group and nine individuals in the infant age group were identified consuming foods from the terrestrial survey area. Table I (see page 51) presents a summary of children's and infants' consumption rates. The table includes the observed mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. No generic data have been determined for the child or infant age groups. In the child age group, no consumption of foods from the following food groups was identified: milk; rabbits/hares; wild fungi; venison; freshwater plants;

freshwater fish. In the infant age group, no consumption of foods from the following food groups was identified: potato; milk; rabbits/hares; sheep meat; and freshwater fish.

Table I. Summary of children's and infants' consumption rates of foods from the terrestrial survey area

Food group	Number of observations	Number of high-rate consumers	Observed maximum for the high-rate group (kg y ⁻¹)	Observed minimum for the high-rate group (kg y ⁻¹)	Observed mean for the high-rate group (kg y)	Observed 97.5 th percentile (kg y ⁻¹)
Child age group (6 - 15 years old)						
Green vegetables	3	3	4.0	3.0	3.7	4.0
Other vegetables	3	3	3.0	2.3	2.8	3.0
Root vegetables	3	3	0.9	0.7	0.9	0.9
Potato	3	3	1.6	1.2	1.5	1.6
Domestic fruit	4	3	4.1	1.7	2.5	3.9
Cattle meat	2	1	4.6	4.6	4.6	4.5
Pig meat	5	3	10.4	7.8	9.5	10.4
Sheep meat	3	3	1.2	0.9	1.1	1.2
Poultry	1	1	0.4	0.4	0.4	Not applicable
Eggs	5	3	7.6	4.9	6.5	7.6
Wild/free foods	1	1	0.1	0.1	0.1	Not applicable
Honey	2	1	3.2	3.2	3.2	3.2
Infant age group (0 - 5 years old)						
Green vegetables	2	2	3.8	3.8	3.8	3.8
Other vegetables	2	2	2.3	2.3	2.3	2.3
Root vegetables	2	2	0.1	0.1	0.1	0.1
Domestic fruit	5	4	4.1	2.1	2.9	4.0
Cattle meat	4	3	6.0	3.0	4.0	5.8
Pig meat	2	1	2.0	2.0	2.0	1.9
Poultry	1	1	0.4	0.4	0.4	Not applicable
Eggs	2	2	4.9	4.6	4.7	4.9
Wild/free foods	7	2	1.6	1.0	1.3	1.5
Honey	1	1	3.2	3.2	3.2	Not applicable
Wild fungi	2	2	0.2	0.2	0.2	0.2
Venison	2	2	1.9	1.3	1.6	1.9
Freshwater plants	4	2	5.2	5.2	5.2	5.2

6.1 Direct radiation survey area

The direct radiation survey area (see Figure 3, page 22) covered the land within 1 km of the Winfrith nuclear licensed site boundary. The survey area was split into three zones which were 0 – 0.25 km, >0.25 – 0.5 km and >0.5 – 1.0 km from the Winfrith nuclear licensed site boundary. The occupancy data collected from the direct radiation survey area are also applicable to inhalation and external exposure pathways arising from gaseous releases from the site.

In 2012, the site licensee at Winfrith, Research Sites Restoration Ltd (RSRL) (owned by Babcock and operated under the NDA) who managed the site, successfully applied for approximately 10% of decommissioned land within the Winfrith site to be delicensed. At the time it was anticipated to be developed by Dorset Green Technology park (previously known as The Winfrith Technology Centre in the 2003 Winfrith survey and currently known as the Dorset Innovation Park). (ONR, 2012). The Dorset Innovation Park (DIP), owned by Dorset County Council, purchased decommissioned land and buildings from the Homes and Communities Agency in 2017 to extend the business park following the agreed delicensing of this land in 2012 (www.onr.org.uk). As part of the eastern side of the site had been delicensed, the size of the nuclear licensed site has reduced since the previous habits survey in 2003, and the village of East Burton was not included in the direct radiation survey area in 2019.

Five properties are located to the north of the site. The River Frome runs from the north to the north-east of the survey area. The DIP and Dorset Police headquarters are located to the east of the site. Numerous businesses of varying sizes (including Inutec Limited) were located on the DIP. The DIP has expanded considerably in recent years, with 167 new jobs and nearly 4000 m² of commercial space created on the park since April 2017 (www.dorsetlep.co.uk), with space for further expansion. To the south of the site in the village of East Knighton there are several farms, most of the residences in the survey area and several businesses. The Tadnoll and Winfrith Heath Nature Reserve covers most of the area to the west of the site. Beef cattle and ponies graze the nature reserve all year round.

6.2 Residential activities

Residential properties are largely located in the village of East Knighton in the southern part of the direct radiation survey area. A handful of properties were located to the north and south-west of the Winfrith site. Interviews were conducted in all three zones at 30 residences. Five properties were interviewed in the 0 – 0.25 km zone, five properties were interviewed in the >0.25 - 0.5 km zone and 20 properties were interviewed in the >0.5 – 1.0 km zone. There was a private residential mobile home park located in the >0.25 – 0.5 km zone.

6.3 Leisure activities

The main leisure activity in the survey area was dog walking. A large number of residents walked their dogs in the area, including on the footpaths around the site boundary. Several people were observed visiting the Tadnoll and Winfrith Heath Nature Reserve. It was reported that individuals were horse riding in this area; however, this was not identified at the time of the survey. Many of the residents grew their own fruit and vegetables in their gardens and collected wild foods from the area.

6.4 Commercial activities

The Dorset Innovation Park (previously known as The Winfrith Technology Centre in the 2003 Winfrith survey), owned by Dorset County Council, purchased decommissioned land and buildings from the Homes and Communities Agency in 2017 to extend the business park following the agreed delicensing of this land in 2012 (www.onr.org.uk). Eighteen companies were based on the Dorset Innovation Park (including Inutec Limited) at the time of the 2019 habits survey with approximately 650 individuals working on the park.

A small number of businesses were located towards the south of the survey area in East Knighton. Three farms had fields within the survey area. The Wool Sewage Treatment Works operated by Wessex Water is located to the north of the site.

Occupancy rates were obtained for employees at 23 businesses; two were in the 0 – 0.25 km zone, 16 were in the >0.25 – 0.5 km zone and five were in the >0.5 – 1.0 km zone. The number of employees at these businesses ranged from one to 20. Where employers provided generic data for a large number of staff, only a representative sample of 20 has been included in the analysis. A total of 387 people was included in the analysis.

The activities of Magnox Limited, Inutec Limited and contractors while at work were not considered in the direct radiation survey, as radiation workers are subject to different radiation protection criteria.

6.5 Occupancy rates

Table 50 presents indoor, outdoor and total occupancy data for adults, children and infants. An analysis of the data by distance zones and occupancy rates is shown in Table 51. A summary of occupancy rates in the direct radiation survey area is presented in Table J (see page 54). Where generic data for groups of people were collected, for example employees of businesses, only representative examples have been included in the data presented.

Table J. Summary of direct radiation occupancy rates				
Zone	Number of observations	Highest indoor occupancy (h y⁻¹)	Highest outdoor occupancy (h y⁻¹)	Highest total occupancy (h y⁻¹)
0 - 0.25 km	58	7731	1826	8354
>0.25 - 0.5 km	107	8290	2373	8656
>0.5 - 1.0 km	125	8368	3833	8664

0 - 0.25 km from the nuclear licensed site boundary

Occupancy data for 58 individuals in the 0 - 0.25 km zone were included in the analysis. The observations were for 46 people who were working in the area and 12 residents. The highest outdoor occupancy rate was for a retired resident. Three different retired residents had the highest indoor, outdoor and total occupancy rates.

>0.25 - 0.5 km from the nuclear licensed site boundary

Occupancy data for 107 individuals in the >0.25 - 0.5 km zone were included in the analysis. The observations were for 11 residents, 92 people who were working in the area and four people tending to cattle. The highest indoor and total occupancy rate was for a retired resident. The highest outdoor occupancy rate was for another resident.

>0.5 - 1.0 km from the nuclear licensed site boundary

Occupancy data for 125 people in the >0.5 - 1.0 km zone were included in the analysis. The observations were for 48 residents (four of whom were also working in the area), 73 people who were working in the area, three people were farming and one person visiting a resident. The highest indoor occupancy rate was for a resident. The highest outdoor occupancy rate was for a retired resident who spent a significant amount of time outdoors. The highest total occupancy rate was for another resident.

6.6 Gamma dose rate measurements

Gamma dose rates were measured indoors and outdoors at most properties where interviews were conducted in the Winfrith direct radiation survey area. Where possible, outdoor measurements were taken approximately 5 to 10 metres from the nearest building and over grass. Gamma dose rate measurements over grass were taken at locations further than 5 km from the site centre to obtain background dose rates. All measurements were taken at a height of 1 metre above the substrate using Thermo RadEye GX Survey Meters connected to a compensated Geiger-Müller tube. The indoor and outdoor measurements have not been adjusted for background dose rates. The results are presented in Table 52 and are summarised in Table K (see page 55).

Table K. Summary of gamma dose rate measurements taken indoors and outdoors at properties in the direct radiation survey area

Substrate	Number of measurements taken	Minimum gamma dose rate at 1 metre ($\mu\text{Gy h}^{-1}$)	Maximum gamma dose rate at 1 metre ($\mu\text{Gy h}^{-1}$)
Indoor measurements^a			
Concrete	12	0.043	0.084
Stone	5	0.064	0.089
Wood	7	0.042	0.088
Outdoor measurements^a			
Concrete	2	0.067	0.077
Grass	26	0.045	0.076
Stone	1	0.053 (one result only)	
Stones	2	0.057	0.061
Tarmac	1	0.067 (one result only)	
Background measurements			
Grass	4	0.058	0.075

Notes

^a These measurements have not been adjusted for background dose rates.

Of the 24 measurements taken indoors at properties, eight measurements were higher than the maximum background reading, and of the 32 measurements taken outdoors at properties, three readings were higher than the maximum background reading. Since gamma dose rate measurements are influenced by the nature of building materials, the substrate over which they are taken, and many other factors, the measurements taken inside properties are expected to be higher than those taken outdoors.

The gamma dose rates can be compared with readings taken by the RIMNET programme, which continuously monitors radiation levels at a network of 92 fixed monitors and 105 mobile monitors distributed throughout the UK (www.gov.uk). The nearest RIMNET station to Winfrith is at Portland Bill, which is approximately 23 km away. The ambient (i.e. background) gamma dose rates at Portland Bill from July to September, which is the most recent data at the time of reporting, ranged from $0.070 \mu\text{Gy h}^{-1}$ to $0.120 \mu\text{Gy h}^{-1}$. All of the outdoor readings taken during the Winfrith habits survey were within or below this range.

7.1 Combined pathways

In determining habits data for the purposes of assessing radiological doses to the public, it may be necessary to consider a combination of pathways. Data are provided in Annex 1 and Annex 2 so that the full effect of combining pathways can be assessed for individual observations, given the concentrations and dose rates for a particular assessment. The rates for individuals in the high-rate groups are emboldened. In some circumstances, it will be possible to make simplifying assumptions and define the consumption and external exposure rates appropriate to a series of potential high-rate groups.

The most extensive combinations of pathways for adult dose assessment are shown in Table 53. Each of the 26 combinations shown in Table 53 represents an actual individual (or individuals) from Annex 1 who has positive data, irrespective of the magnitude, for each pathway marked with a cross. Other individuals from Annex 1 have combinations that are not listed in Table 53 because they have fewer pathways and a dose assessment for them would be adequately covered by one of the 26 listed combinations.

7.2 Prenatal child dose assessment

Dose assessment of prenatal children was introduced routinely for the first time in the Radioactivity in Food and the Environment report for 2005 (EA, EHS, FSA and SEPA, 2006), following the publication of recommendations by the Radiation Protection Division of the Health Protection Agency (National Radiological Protection Board, 2005). The adopted approach is to use the consumption and occupancy data for women of childbearing age in order to calculate the potential dose to the prenatal child. Therefore, consumption and occupancy data collected during the Winfrith habits survey for females of childbearing age are presented in Annex 5. The Office of National Statistics classifies women to be of childbearing age if they are between 15 and 44 years old (www.ons.gov.uk); this age range has been used in Annex 5. It was not possible to collect ages for all female observations during the habits survey. However, these females with unknown ages have been included in Annex 5 as they might be women of childbearing age.

7.3 Total dose assessment

The UK environment agencies and the Food Standards Agency have considered ways of using habits data to estimate *total dose* retrospectively. The adopted approach is to use the adult consumption and occupancy data collected in each habits survey to create a matrix with a series of habits profiles for each site. The National Dose Assessment Working Group (NDAWG) considered this approach to

assessing retrospective total doses (Camplin *et al*, 2005) and agreed that using habits profiles is an appropriate approach. The method used to estimate *total dose* integrated across pathways is provided in the RIFE reports (e.g. EA, FSA, FSS, NRW, NIEA and SEPA, 2019).

The relevant matrix for the adults' profiled habits data is shown in Annex 6. Additionally, profiles have been created for the child and infant age groups, and for women of childbearing age. These are shown in Annexes 7, 8, and 9 respectively. Most of the groups used for the pathways in the matrices are exactly analogous to the groups used throughout this habits survey report, although the names used are slightly different, for example 'Fruit – Domestic' rather than 'Domestic fruit'. However, in order to increase the robustness of the total dose assessments, some of the groups that are used throughout the rest of this report have been amalgamated together for use in the matrices. These are indicated in the notes at the foot of each matrix, where applicable. The 'Plume pathways' are related to inhalation and external exposure arising from gaseous discharges and use the total of the individuals' indoor and outdoor occupancy rates for each of the direct radiation zones. The 'Direct' pathway is expressed as the proportion of the profile members who are exposed to direct radiation.

8 COMPARISONS WITH THE PREVIOUS SURVEY

The results from this 2019 survey are compared below with results from the last habits survey undertaken at Winfrith in 2003. The aquatic and terrestrial survey areas in the 2003 survey were the same as those in the 2019 survey. The size of the direct radiation survey area has decreased since the 2003 survey because a part of the Magnox Limited site had been delicensed. Consequently, the direct radiation area no longer includes the village of East Burton. The comparison of occupancy rates in the direct radiation area is for all age groups combined. All other comparisons are for adults only.

8.1 Aquatic survey area

Between 2003 and 2019, there was a change in conservation designations and fishing restrictions, which may have impacted on commercial fisheries. Approximately 75% of the aquatic survey area is now included in an MCZ and SAC where no bottom towed fishing gear is permitted. There has also been an impact on fishing habits from licence capping and bass restrictions, which has encouraged sustainable rod and line fishing for bass. Commercial potting for crab and lobster continued to be prevalent.

At the time of the survey, a company was identified collecting seaweed from the survey area on a small scale for commercial production of seaweed fertiliser, and a seaweed farm was identified in Portland Harbour. Small amounts of various species of edible seaweed were collected by several individuals for consumption, whereas in 2003 no seaweed consumption was identified.

The main species of fish consumed by the adult high-rate group in 2019 were mackerel and bass, and the main species of fish consumed by the adult high-rate group in 2003 were plaice, bass and mackerel. The main species of crustaceans consumed by the adult high-rate group in 2003 and 2019 were common lobster and brown crab. The main species of molluscs consumed by the adult high-rate group in 2019 were scallop, razor shell and whelk, and the main species of molluscs consumed by the adult high-rate group in 2003 were scallops, Manila clams and whelks. The consumption of wildfowl was not identified in 2019 or 2003. The main species of marine plants/algae consumed by the adult high-rate group in 2019 were sea spaghetti and sea beet whereas in 2003 there were no individuals identified consuming marine plants/algae.

A comparison between the 2003 and 2019 data for the consumption of aquatic foods is presented in Table L (see page 59).

Table L. Comparison between 2003 and 2019 consumption rates of aquatic food groups for adults

Food group	2003			2019		
	Number in high-rate group	Maximum consumption rate (kg y ⁻¹)	Mean consumption rate for the high-rate group (kg y ⁻¹)	Number in high-rate group	Maximum consumption rate (kg y ⁻¹)	Mean consumption rate for the high-rate group (kg y ⁻¹)
Fish	10	73.7	40.4	41	32.4	20.6
Crustaceans	6	22.6	14.9	5	25.6	20.4
Molluscs	2	13.7	13.7	4	18.9	18.6
Marine plants/algae	Not identified			2	3.9	3.9

For fish, in 2019 compared with 2003, there was a significant decrease in the maximum and mean consumption rates for the adult high-rate group. This was attributed to two high-rate fish consumers in 2003 who were no longer in the area in 2019.

For crustaceans and molluscs, there was an increase in the mean consumption rate of the high-rate group. No specific reasons for these changes were identified.

The consumption of marine plants/algae was not identified in 2003 but several edible seaweeds species were being consumed in 2019. Foraging for wild foods was popular on the shoreline in this area in 2019.

In 2003, intertidal occupancy for adults was recorded over the following two substrates: sand; sand and stones. In 2019, activities were recorded over the same substrates, with the addition of occupancy over rock and over stones.

The following activities were undertaken by the individuals in the adult high-rate groups for occupancy over intertidal substrates:

- In 2003: angling and walking.
- In 2019: angling, instructing coastering, working on the shore, lifeguard duties, dog walking and walking.

The following activities were undertaken by the individuals in the adult high-rate groups for handling fishing gear:

- In 2003: handling pots and nets.
- In 2019: handling pots and nets.

The following activities were undertaken by the individuals in the adult high-rate groups for handling sediment:

- In 2003: bait digging.
- In 2019: collecting winkles.

A comparison between the 2003 and 2019 data for adult occupancy over intertidal substrates, handling fishing gear and handling sediment is shown in Table M (see below).

Table M. Comparison between 2003 and 2019 intertidal occupancy rates and handling rates of fishing gear and sediment for adults

Intertidal substrate or handling pathway	2003			2019		
	Number in high-rate group	Maximum occupancy or handling rate (h y ⁻¹)	Mean occupancy or handling rate for the high-rate group (h y ⁻¹)	Number in high-rate group	Maximum occupancy or handling rate (h y ⁻¹)	Mean occupancy or handling rate for the high-rate group (h y ⁻¹)
Rock	Not identified			12	84	55
Sand	5*	208*	144*	11	387	387
Sand and stones	3	400	296	17	1038	562
Stones	Not identified			5	1038	713
Handling fishing gear	17	1750	1161	3	1278	1278
Handling sediment	1*	10*	10*	2	5	5

*data adjusted as children were included in Table 14 and Table 15 in the Winfrith 2003 report (McTaggart *et al.*, 2004)

In 2019, compared to 2003, the mean intertidal occupancy rate for the adult high-rate group increased significantly over sand and stones and over sand. Occupancy over rock and over stones was identified in 2019 but not in 2003.

The increase in the occupancy rate over sand and stones was due to the identification in 2019 of several lifeguards spending time working on sand and stones at Weymouth beach. The increase in the occupancy over sand in 2019 was due to the identification of several people working on the shore. New activities identified on rock included angling and coastering. New activities identified on stones included lifeguard duties, dog walking and walking at Greenhill and Lodmoor, water sports preparation at Ferry Bridge, sitting on the beach at Greenhill, Lodmoor and Bowleaze Cove and jogging at Lodmoor and Bowleaze Cove.

The mean rates for the adult high-rate groups for handling fishing gear slightly increased in 2019 compared to 2003, and handling sediment decreased in 2019 compared to 2003.

For activities taking place in the water in the aquatic survey area, the maximum adult occupancy rate increased from 580 h y⁻¹ in 2003, for an individual who was surfing at Portland Harbour, to 840 h y⁻¹ in 2019, for a group of eight instructors who were teaching water sports at Portland Harbour and Ferry Bridge.

For activities taking place on the water in the aquatic survey area, the maximum adult occupancy rate decreased slightly from 3200 h y⁻¹ in 2003, for a commercial fisherman in Weymouth Bay, to 2500 h y⁻¹ in 2019, for a commercial fishing crew who were rod and line fishing throughout the survey area.

The use of seaweed as a fertiliser or as animal feed was not identified in 2003 or 2019. In 2019, a company was identified collecting seaweed from the survey area on a small scale for commercial production of seaweed fertiliser.

8.2 Terrestrial survey area

The principal types of farm produce within the area in 2019 continued to be a mix of milk (from dairy cattle), beef cattle and lambs. Farms that were producing sheep milk, chicken eggs and trout in 2003 were no longer producing these foods in 2019. The growing of fruit and vegetables in gardens, beekeeping, shooting on farmland and the collection of wild/free foods were identified in both surveys.

The mean consumption rates for the adult high-rate groups for terrestrial food groups from the 2003 and 2019 surveys are shown in Table N (see page 62).

Table N. Comparison between 2003 and 2019 mean consumption rates for the adult high-rate groups for terrestrial food groups (kg y⁻¹ and l y⁻¹)		
Food group	2003	2019
Green vegetables	30.7	17.7
Other vegetables	32.4	37.4
Root vegetables	34.0	22.8
Potato	90.1	30.9
Domestic fruit	43.0	13.0
Milk	123.2	82.0
Cattle meat	26.8	41.9
Pig meat	16.8	8.0
Sheep meat	8.5	40.7
Goat meat	1.4	Not identified
Poultry	8.9	12.9
Eggs	12.2	25.9
Wild/free foods	6.5	3.2
Rabbits/hares	Not identified	2.2
Honey	7.5	2.8
Wild fungi	1.2	0.5
Venison	4.3	4.6
Freshwater fish	0.5	Not identified
Freshwater plants	10.4	10.4

In 2019, compared to 2003, the mean consumption rates for the adult high-rate groups increased in 2019 in the following food groups: other vegetables; cattle meat; sheep meat; poultry; eggs; venison. In 2019 the mean consumption rates for the adult high-rate groups decreased in the following food groups: green vegetables; root vegetables; potato; domestic fruit; milk; pig meat; wild/free foods; honey; wild fungi. The mean consumption of freshwater plants did not change between 2003 and 2019. The consumption of goat meat and freshwater fish was identified in 2003 but not in 2019. The consumption of rabbits/hares was identified in 2019 but not in 2003. The most significant decreases in the consumption rates were for potato, domestic fruit, wild/free foods, honey and wild fungi while the most significant increases were for sheep meat and eggs.

Goat meat was consumed in 2003 but was not identified in 2019 because the smallholding on which the goats were reared in 2003 had been sold and the owners had moved away from the survey area. Freshwater fish was not consumed in 2019 because the fish farm in the area had ceased operating. Milk consumption reduced moderately and the number of milk consumers decreased in 2019 compared to 2003. No specific reasons were identified for the other changes in consumption rates.

In the 2003 Winfrith habits survey, livestock on two farms had access to water from the River Frome and on another farm they were supplied by water from a borehole. One household was identified whose sole water supply was from a borehole, and two properties near the Winfrith site had capped or disused wells in their gardens. In 2019 human consumption of groundwater via boreholes was identified at

several farmhouses. Livestock were identified drinking mains water and had access to spring, stream water and water from a borehole.

8.3 Direct radiation survey area

The size of the direct radiation survey had decreased slightly in 2019 but the activities identified in 2003 and 2019 were similar. These included people residing, working and undertaking recreational activities. A comparison between the 2003 and 2019 direct radiation occupancy rates for all age groups combined, by zone, is presented in Table O (see below).

Table O. Comparison between 2003 and 2019 direct radiation occupancy rates for all age groups combined (h y⁻¹)		
	2003	2019
0 – 0.25 km zone		
Highest indoor	6674	7731
Highest outdoor	2190	1826
Highest total	8708	8354
>0.25 – 0.5 km zone		
Highest indoor	7911	8290
Highest outdoor	3646	2373
Highest total	8760	8656
>0.5 – 1.0 km zone		
Highest indoor	8124	8368
Highest outdoor	2856	3833
Highest total	8712	8664

The occupancy rates in the direct radiation survey area were broadly similar in 2003 and 2019. The highest indoor, outdoor and total occupancy rates in all three zones in 2003 and 2019 were all for residents.

A comparison of gamma dose rates at the same properties interviewed in both survey years is usually presented in section 9.1 of the radiological habits survey reports. However due to the significant lapse of time between the previous Winfrith survey in 2003 and the most recent survey in 2019, it is not possible to obtain data to allow a comparison of gamma dose rates at residences in the Winfrith direct radiation survey area.

9 MAIN FINDINGS

The survey investigated three potential sources of public radiation exposure from the Winfrith site, which were:

- Discharges of liquid radioactive waste into the English Channel via pipelines at Arish Mell
- Discharges of gaseous radioactive waste to the atmosphere
- Emissions of direct radiation

Information was obtained by conducting interviews with members of the public including, for example, commercial fishermen, anglers, people spending time on intertidal substrates, farmers, beekeepers and people spending time within the direct radiation survey area. These people were targeted because their diet and habits may cause them to be exposed to radioactivity from the site. However, it should be noted that the most exposed people can only be defined with the outcome of a dose assessment. Data for 774 individuals are presented in this report. All consumption rates recorded are only for foods produced, collected or caught from within the aquatic and terrestrial survey areas as defined in Section 2.3. The consumption and occupancy rates in this section are presented to two significant figures.

9.1 Aquatic survey area

The mean consumption rates for the adult high-rate groups (as defined in Section 3.4) for the separate aquatic consumption pathways for foods potentially affected by liquid discharges were:

- 21 kg y⁻¹ for fish
- 20 kg y⁻¹ for crustaceans
- 19 kg y⁻¹ for molluscs
- 3.9 kg y⁻¹ for marine plants/algae

The predominant foods consumed by the people in the adult high-rate groups were:

- For fish: mackerel and bass
- For crustaceans: common lobster and brown crab
- For molluscs: scallop, razor shell and whelk
- For marine plants/algae: sea spaghetti and sea beet

A company was identified collecting seaweed from the survey area on a small scale for commercial production of seaweed fertiliser. The use of seaweed as fertiliser or animal feed was not identified.

The mean occupancy rates for the adult high-rate groups over the separate intertidal substrates were:

- 55 h y⁻¹ for rock
- 390 h y⁻¹ for sand
- 560 h y⁻¹ for sand and stones
- 710 h y⁻¹ for stones

The mean rates for the adult high-rate groups for handling were:

- 1300 h y⁻¹ for handling fishing gear (nets and pots)
- 5.0 h y⁻¹ for handling sediment

The maximum adult occupancy rates for water activities were:

- 840 h y⁻¹ for 'in water'
- 2500 h y⁻¹ for 'on water'

Individuals in the child and infant age groups were identified consuming aquatic foods, but only individuals in the child age group/the former were identified undertaking activities in the aquatic survey area.

9.2 Terrestrial survey area

The mean consumption rates for the adult high-rate groups for the separate consumption pathways for foods potentially affected by gaseous discharges were:

- 18 kg y⁻¹ for green vegetables
- 37 kg y⁻¹ for other vegetables
- 23 kg y⁻¹ for root vegetables
- 31 kg y⁻¹ for potato
- 13 kg y⁻¹ for domestic fruit
- 82 l y⁻¹ for milk
- 42 kg y⁻¹ for cattle meat
- 8.0 kg y⁻¹ for pig meat
- 41 kg y⁻¹ for sheep meat
- 13 kg y⁻¹ for poultry
- 26 kg y⁻¹ for eggs
- 3.2 kg y⁻¹ for wild/free foods
- 2.2 kg y⁻¹ for rabbits/hares
- 2.8 kg y⁻¹ for honey
- 0.5 kg y⁻¹ for wild fungi
- 4.6 kg y⁻¹ for venison
- 10 kg y⁻¹ for freshwater plants

No consumption of goat meat or freshwater fish from the survey area was identified.

The consumption of terrestrial foodstuffs by individuals in the child and infant age groups was also recorded.

Human consumption of groundwater from boreholes was identified at several farmhouses and livestock were identified drinking spring, stream and borehole water.

9.3 Direct radiation survey area

The highest indoor, outdoor and total occupancy rates recorded for each zone were:

0 - 0.25 km zone

- 7700 h y⁻¹ for the indoor occupancy rate
- 1800 h y⁻¹ for the outdoor occupancy rate
- 8400 h y⁻¹ for the total occupancy rate

>0.25 - 0.5 km zone

- 8300 h y⁻¹ for the indoor occupancy rate
- 2400 h y⁻¹ for the outdoor occupancy rate
- 8700 h y⁻¹ for the total occupancy rate

>0.5 - 1.0 km zone

- 8400 h y⁻¹ for the indoor occupancy rate
- 3800 h y⁻¹ for the outdoor occupancy rate
- 8700 h y⁻¹ for the total occupancy rate

In all three zones the highest indoor, outdoor and total occupancy rates were for residents.

10 HABITS SURVEY INFORMATION FOR CONSIDERATION IN THE SELECTION OF SAMPLES AND MEASUREMENTS FOR MONITORING PROGRAMMES

Habits surveys provide site-specific information on the consumption of locally produced foods and the location and types of activities which may affect the public's exposure to radiation. This information can be used to help in the selection of samples and measurements for the monitoring programmes by identifying foods that are consumed at high rates and the locations where people spend high amounts of time.

In England and Wales, the monitoring programme for radioactivity in food is undertaken by the Food Standards Agency, and the monitoring programme for radioactivity in the environment is conducted by the Environment Agency. The results of these programmes are published annually in the RIFE reports (e.g. EA, FSA, FSS, NRW, NIEA and SEPA, 2019).

In 2013 the Food Standards Agency completed a public consultation to review the way that they monitor radioactivity in food (FSA, 2012 and 2013). The outcome of the consultation was to implement a revised monitoring programme in 2014, with reductions in sampling and analysis of some foods that were considered to represent a very low radiological risk.

10.1 Summary of the monitoring programmes for Winfrith

The 2018 monitoring programmes relevant to the Winfrith area included the samples and measurements listed below. The location names, foods and substrate classifications are taken directly from RIFE 24 (EA, FSA, FSS, NRW, NIEA and SEPA, 2019). Some of the samples and measurements taken for the monitoring programmes may be from outside the survey areas used for the 2019 Winfrith habits survey.

Aquatic samples

Food and environmental samples

<i>Sample</i>	<i>Location</i>
Brill	Weymouth Bay
Crabs	Lulworth Banks
Scallops	Lulworth Ledges
Seaweed	Lulworth Cove
Seawater	Lulworth Cove

Gamma dose rate measurements over intertidal sediments

<i>Location</i>	<i>Substrate</i>
Weymouth Bay	Sand
Osmington Mills	Rock and sand
Durdle Door	Shingle
Lulworth Cove	Shingle
Kimmeridge Bay	Shingle and rock
Swanage Bay	Sand
Poole Harbour	Sand

Terrestrial samples

Milk
 Beetroot
 Wheat
 Grass
 Soil
 Sediment
 Freshwater

10.2 Information from the 2019 Winfrith habits survey for use in the selection of samples and measurements for monitoring programmes

Food Standards Agency monitoring

The following foods were either consumed in the largest quantities in their food groups or were the only food in their food group and could be considered when selecting samples for the Food Standards Agency monitoring programme.

<i>Food</i>	<i>Food Group</i>
Mackerel	Fish
Common lobster	Crustacean
Scallop	Mollusc
Sea spaghetti	Marine plants/algae
Courgette	Green vegetables
Runner bean	Other vegetables
Carrot	Root vegetables
Potato	Potato
Apple	Domestic fruit
Cows' milk	Milk
Beef	Cattle meat
Pork	Pig meat
Lamb	Sheep meat
Pheasant	Poultry
Chicken egg	Eggs
Blackberry	Wild/free foods
Rabbit	Rabbits/hares
Honey	Honey
Mushroom	Wild fungi

Venison
Watercress

Venison
Freshwater plants

Environment Agency monitoring

The current environmental monitoring programme adequately covers the Winfrith area and no changes are suggested.

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Table 1. Survey coverage

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
SUMMARY OF ALL PATHWAYS					
All potential interviewees in the Winfrith aquatic, terrestrial and direct radiation survey areas.	Number of people resident in the terrestrial survey area (excluding those resident in the direct radiation survey area) (See (B) TERRESTRIAL PATHWAYS)	3638 ^a	62 ^b	2%	The survey targeted individuals who were potentially the most exposed, mostly producers of local foods such as farmers and smallholders.
	Number of people resident in the direct radiation survey area (See (C) DIRECT RADIATION PATHWAYS)	168	71 ^b	42%	Interviews were conducted at 30 residences out of an estimated total of 84 permanent residences.
	Number of people working, visiting and undertaking recreational activities in the direct radiation survey area (See (C) DIRECT RADIATION PATHWAYS)	U	219 ^b	U	Excluding employees and contractors at the nuclear licensed site. Where generalised data for groups of people were obtained, for example employees at some businesses, only a limited number of representative individuals have been included.
	Number of people effected by liquid discharges (excluding those assigned to other categories above) (See (A) AQUATIC PATHWAYS)	U	422 ^b	U	Where generalised data for groups of people were obtained, for example members of sailing clubs, only a limited number of representative individuals have been included.
	Total for aquatic, terrestrial and direct radiation survey areas	U	774 ^b	U	
(A) AQUATIC PATHWAYS					
Commercial and hobby fishermen	Number of commercial and hobby fishermen fishing in the aquatic survey area	U	14	U	
People undertaking activities in or on water (e.g. swimmers, surfers, boat anglers, commercial and hobby fishermen etc.)	Number of people undertaking activities in or on water in the aquatic survey area	U	333	U	Where generalised data for groups of people were obtained, for example members of sailing clubs, only a limited number of representative individuals have been included.
People using the shore (e.g. dog walkers, shore anglers, people playing, etc.)	Number of people undertaking intertidal activities in the aquatic survey area	U	182	U	
Fish consumers	Number of people consuming fish from the aquatic survey area	U	71	U	
Crustacean consumers	Number of people consuming crustaceans from the aquatic survey area	U	53	U	
Mollusc consumers	Number of people consuming molluscs from the aquatic survey area	U	50	U	

Table 1. Survey coverage

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(B) TERRESTRIAL PATHWAYS					
Farmers and smallholders	Number of farmers, smallholders and their family members consuming food from the terrestrial survey area	114	50	44%	Interviews were conducted at 35 farms and three small holdings out of an estimated 35 farms in the terrestrial survey area. Many farms were part of a conglomerate of farms who did not consume produce from the farms.
Gardeners	Number of gardeners and their family members consuming food from the terrestrial survey area	U	72	U	
Honey consumers	Number of people consuming honey produced in the survey area	U	46	U	Three beekeepers who kept hives in the survey area were interviewed.
(C) DIRECT RADIATION PATHWAYS					
Residents	Number of residents in the survey area	168	71	42%	Interviews were conducted at 30 residences out of an estimated total of 84 permanent residences.
Employees	Number of people working in the survey area	U	218	U	Excluding people who were living in the direct radiation survey area and employees and contractors at the nuclear licensed site. Where generalised data for groups of people were obtained, for example employees at some businesses, only a limited number of representative individuals have been included.
Visitors (people undertaking recreational activities or visiting relatives)	Number of people visiting the survey area	U	1	U	
BREAKDOWN OF AGE GROUPS FOR PEOPLE RESIDENT IN THE 5 km TERRESTRIAL SURVEY AREA					
Adult	16-year-old and over	3164 ^a	123	4%	
Child	6-year-old to 15-year-old	331 ^a	9	2%	
Infant	0 to 5-year-old	121 ^a	9	4%	

Notes

^a Estimate of the number of people resident in the 5 km terrestrial survey area based on data from www.ons.gov.uk.

^b The number of people for whom positive data was obtained for pathways (A) and (B) and (C) will usually not equal the relevant totals in the summary of all pathways. This is because in sections (A), (B) and (C) some individuals may be counted two or more times, for example someone who goes shore angling and consumes the catch.

U - Unknown

Table 2. Typical food groups used in habits surveys

Food group	Examples of foods within the group
Green vegetables	Asparagus, broccoli, Brussels sprout, cabbage, calabrese, cauliflower, chard, courgette, cucumber, gherkin, globe artichoke, herbs, kale, leaf beet, lettuce, marrow, spinach
Other vegetables	Aubergine, broad bean, chilli pepper, French bean, kohlrabi, mangetout, pea, pepper, pumpkin, runner bean, sweetcorn, tomato
Root vegetables	Beetroot, carrot, celeriac, celery, chicory, fennel, garlic, Jerusalem artichoke, leek, onion, parsnip, radish, shallot, spring onion, swede, turnip
Potato	Potato
Domestic fruit	Apple, apricot, blackberry, blackcurrant, boysenberry, cherry, damson, fig, gooseberry, grape, greengage, huckleberry, loganberry, melon, nectarine, peach, pear, plum, raspberry, redcurrant, rhubarb, rowanberry, strawberry, tayberry, whitecurrant
Milk	Cows' milk, cream, goats' milk, yoghurt
Cattle meat ^a	Beef
Pig meat ^a	Pork
Sheep meat ^a	Lamb, mutton
Poultry ^b	Chicken, duck, goose, grouse, guinea fowl, partridge, pheasant, pigeon, turkey, woodcock
Eggs	Chicken egg, duck egg, goose egg
Wild/free foods	Blackberry, chestnut, crab apple, damson, dandelion root, elderberry, nettle, rowanberry, sloe
Honey	Honey
Wild fungi	Mushrooms, other edible fungi
Rabbits/Hares	Hare, rabbit
Venison ^a	Venison
Fish (sea)	Bass, brill, cod, ling, dab, Dover sole, flounder, gurnard, haddock, hake, herring, lemon sole, mackerel, monkfish, mullet, plaice, pollack, rays, saithe, salmon, sea trout, sprat, turbot, whitebait, whiting, witch, cuttlefish ^c , squid ^c
Fish (freshwater)	Brown trout, eel (river), perch, pike, rainbow trout, salmon (river)
Crustaceans	Brown crab, common lobster, crawfish, <i>Nephrops</i> , prawn, shrimp, spider crab, squat lobster, velvet swimming crab
Molluscs	Cockles, limpets, mussels, oysters, razor clam, scallops, whelks, winkles
Wildfowl ^b	Canada goose, greylag goose, mallard, pink-footed goose, pintail, shoveler, teal, wigeon

Notes

^a Including offal

^b Domesticated ducks and geese are classified as poultry. Wild ducks and geese are classified as wildfowl.

^c Although squid and cuttlefish are molluscs, radiologically they are more akin to fish.

Table 3. Adults' consumption rates of fish (kg y⁻¹) from the Winfrith aquatic survey area

Person ID number	Bass	Bream	Brill	Cod	Dover sole	Grey gurnard	Grey mullet	Ling	Mackerel	Monkfish	Plaice	Pollack	Red gurnard	Thornback ray	Turbot	Whiting	Total
2761/1/1	5.6	-	-	2.6	-	-	-	-	6.6	2.6	-	14.9	-	-	-	-	32.4
2761/2/1	5.6	-	-	2.6	-	-	-	-	6.6	2.6	-	14.9	-	-	-	-	32.4
2761/3/1	5.6	-	-	2.6	-	-	-	-	6.6	2.6	-	14.9	-	-	-	-	32.4
2584/1/1	-	-	-	-	-	-	-	-	28.2	-	-	-	-	-	-	-	28.2
2584/2/1	-	-	-	-	-	-	-	-	28.2	-	-	-	-	-	-	-	28.2
2584/3/1	-	-	-	-	-	-	-	-	28.2	-	-	-	-	-	-	-	28.2
2749/1/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/2/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/3/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/4/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/5/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/6/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2749/7/1	5.2	-	5.2	-	-	0.6	5.2	-	-	1.4	5.2	-	-	0.9	-	-	23.7
2667/1/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2667/2/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2667/3/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2667/4/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2667/5/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2667/6/1	7.2	7.2	-	-	-	-	1.8	-	7.2	-	-	-	-	-	-	-	23.4
2737/1/1	-	4.2	4.2	-	-	-	-	-	-	-	-	4.2	-	-	4.2	4.2	21.0
2744/1/1	-	-	-	4.2	4.2	-	-	-	4.2	-	4.2	-	-	4.2	-	-	21.0
2744/2/1	-	-	-	4.2	4.2	-	-	-	4.2	-	4.2	-	-	4.2	-	-	21.0
2744/3/1	-	-	-	4.2	4.2	-	-	-	4.2	-	4.2	-	-	4.2	-	-	21.0
2643/1/1	20.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.9
2643/2/1	20.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.9
2581/1/1	3.8	-	-	-	-	-	-	-	-	-	1.3	-	-	-	13.6	-	18.7
2581/2/1	3.8	-	-	-	-	-	-	-	-	-	1.3	-	-	-	13.6	-	18.7
2581/3/1	3.8	-	-	-	-	-	-	-	-	-	1.3	-	-	-	13.6	-	18.7
2581/4/1	3.8	-	-	-	-	-	-	-	-	-	1.3	-	-	-	13.6	-	18.7
2581/5/1	3.8	-	-	-	-	-	-	-	-	-	1.3	-	-	-	13.6	-	18.7
2612/2/1	-	2.4	2.4	0.4	-	-	-	0.4	4.8	-	2.4	0.4	-	-	4.8	-	18.0
2689/1/1	-	-	-	9.0	-	-	-	-	-	-	6.0	-	-	-	-	-	15.0
2689/2/1	-	-	-	9.0	-	-	-	-	-	-	6.0	-	-	-	-	-	15.0
2671/1/1	-	2.5	0.8	-	-	-	-	-	0.4	-	-	8.7	-	-	-	-	12.3
2671/2/1	-	2.5	0.8	-	-	-	-	-	0.4	-	-	8.7	-	-	-	-	12.3
2598/2/1	2.3	4.6	-	-	-	-	-	-	2.3	-	-	-	-	-	2.3	-	11.6
2780/1/1	2.8	-	2.8	-	-	-	-	-	2.8	-	2.8	-	-	-	-	-	11.2
2764/2/1	-	-	-	-	-	-	3.2	-	3.5	-	-	-	-	4.2	-	-	10.9
2764/4/1	-	-	-	-	-	-	3.2	-	3.5	-	-	-	-	4.2	-	-	10.9
2764/5/1	-	-	-	-	-	-	3.2	-	3.5	-	-	-	-	4.2	-	-	10.9
2764/6/1	-	-	-	-	-	-	3.2	-	3.5	-	-	-	-	4.2	-	-	10.9
2732/1/1	3.3	-	-	-	-	-	-	-	3.3	-	-	3.3	0.7	-	-	-	10.5

Table 3. Adults' consumption rates of fish (kg y⁻¹) from the Winfrith aquatic survey area

Person ID number	Bass	Bream	Brill	Cod	Dover sole	Grey gurnard	Grey mullet	Ling	Mackerel	Monkfish	Plaice	Pollack	Red gurnard	Thornback ray	Turbot	Whiting	Total
2730/2/1	1.7	1.7	-	-	-	-	-	-	1.7	-	-	1.7	-	1.7	1.7	-	10.2
2637/1/1	3.4	3.4	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	10.2
2637/2/1	3.4	3.4	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	10.2
2637/3/1	3.4	3.4	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	10.2
2738/1/1	3.4	3.4	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	10.2
2788/1/1	2.5	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	5.0
2788/2/1	2.5	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	5.0
2788/5/1	2.5	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	5.0
2788/6/1	2.5	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	5.0
2597/1/1	-	2.3	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	3.3
2597/2/1	-	2.3	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	3.3
2597/3/1	-	2.3	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	3.3
2597/4/1	-	2.3	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	3.3
2660/1/1	1.4	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	3.2
2660/2/1	1.4	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	3.2
2733/1/1	0.9	-	-	-	-	-	-	-	0.9	-	0.9	-	-	-	-	-	2.6
2733/2/1	0.9	-	-	-	-	-	-	-	0.9	-	0.9	-	-	-	-	-	2.6
2791/1/1	1.8	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	2.5
2791/2/1	1.8	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	2.5
2612/1/1	-	0.2	0.2	-	-	-	-	-	0.8	-	0.2	0.2	-	-	0.8	-	2.4
2780/2/1	0.3	-	0.3	-	-	-	-	-	0.3	-	0.3	-	-	-	-	-	1.4
2780/3/1	0.3	-	0.3	-	-	-	-	-	0.3	-	0.3	-	-	-	-	-	1.4
2780/5/1	0.3	-	0.3	-	-	-	-	-	0.3	-	0.3	-	-	-	-	-	1.4
2742/1/1	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	1.2
2742/2/1	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	1.2
2747/1/1	-	-	0.4	-	-	-	-	-	0.3	-	-	-	-	-	-	-	0.7
2747/2/1	-	-	0.4	-	-	-	-	-	0.3	-	-	-	-	-	-	-	0.7
2780/6/1	0.1	-	0.1	-	-	-	-	-	0.1	-	0.1	-	-	-	-	-	0.4
2780/4/1	0.05	-	0.05	-	-	-	-	-	0.05	-	0.05	-	-	-	-	-	0.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of fish for adults based on the 41 high-rate consumers is 20.6 kg y⁻¹

The observed 97.5th percentile rate based on 71 observations is 32.4 kg y⁻¹

Table 4. Adults' consumption rates of crustaceans (kg y⁻¹) from the Winfrith aquatic survey area

Person ID number	Brown crab	Common lobster	Common prawn	Spiny spider crab	Total
2761/1/1	2.9	22.4	0.2	-	25.6
2764/2/1	5.1	14.0	-	-	19.1
2764/4/1	5.1	14.0	-	-	19.1
2764/5/1	5.1	14.0	-	-	19.1
2764/6/1	5.1	14.0	-	-	19.1
2598/2/1	3.3	5.2	-	-	8.5
2744/1/1	3.3	5.2	-	-	8.5
2744/2/1	3.3	5.2	-	-	8.5
2744/3/1	3.3	5.2	-	-	8.5
2749/1/1	2.6	4.1	-	-	6.7
2749/2/1	2.6	4.1	-	-	6.7
2749/3/1	2.6	4.1	-	-	6.7
2749/4/1	2.6	4.1	-	-	6.7
2749/5/1	2.6	4.1	-	-	6.7
2749/6/1	2.6	4.1	-	-	6.7
2749/7/1	2.6	4.1	-	-	6.7
2643/1/1	2.3	3.7	-	-	6.0
2643/2/1	2.3	3.7	-	-	6.0
2592/1/1	3.3	-	-	-	3.3
2592/2/1	3.3	-	-	-	3.3
2761/2/1	2.9	-	0.2	-	3.1
2761/3/1	2.9	-	0.2	-	3.1
2581/1/1	0.5	2.6	-	-	3.1
2581/2/1	0.5	2.6	-	-	3.1
2581/3/1	0.5	2.6	-	-	3.1
2581/4/1	0.5	2.6	-	-	3.1
2581/5/1	0.5	2.6	-	-	3.1
2759/1/1	2.7	-	-	-	2.7
2780/1/1	0.9	1.0	-	-	2.0
2742/1/1	1.6	-	-	-	1.6
2742/2/1	1.6	-	-	-	1.6
2585/1/1	0.6	0.9	-	-	1.5
2585/1/2	0.6	0.9	-	-	1.5
2585/1/3	0.6	0.9	-	-	1.5
2585/1/4	0.6	0.9	-	-	1.5
2585/2/1	0.6	0.9	-	-	1.5
2585/2/2	0.6	0.9	-	-	1.5
2760/1/1	0.3	0.4	-	0.5	1.2
2760/2/1	0.3	0.4	-	0.5	1.2
2594/3/1	1.0	-	-	-	1.0
2743/1/1	0.5	0.2	-	-	0.8
2743/2/1	0.5	0.2	-	-	0.8
2687/1/1	-	0.4	-	-	0.4
2698/1/1	0.3	-	-	-	0.3
2698/2/1	0.3	-	-	-	0.3
2747/1/1	0.3	-	-	-	0.3
2747/2/1	0.3	-	-	-	0.3
2780/2/1	0.1	0.1	-	-	0.2
2780/3/1	0.1	0.1	-	-	0.2
2780/5/1	0.1	0.1	-	-	0.2
2730/2/1	0.1	-	-	-	0.1
2780/6/1	0.03	0.04	-	-	0.07
2780/4/1	0.02	0.02	-	-	0.03

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of crustaceans for adults based on the 5 high-rate consumers is 20.4 kg y⁻¹

The observed 97.5th percentile rate based on 53 observations is 19.1 kg y⁻¹

Table 5. Adults' consumption rates of molluscs (kg y⁻¹) from the Winfrith aquatic survey area

Person ID number	Cockle	Mussel	Pacific oyster	Razor shell	Scallop	Whelk	Winkle	Total
2764/2/1	0.9	-	0.9	4.2	10.4	2.4	-	18.9
2764/4/1	0.9	-	0.9	4.2	10.4	2.4	-	18.9
2764/5/1	0.9	-	0.9	4.2	10.4	2.4	-	18.9
2764/6/1	0.9	-	-	4.2	10.4	2.4	-	18.0
2760/1/1	-	3.8	-	-	1.6	-	-	5.3
2760/2/1	-	3.8	-	-	1.6	-	-	5.3
2744/1/1	-	-	-	-	-	3.9	-	3.9
2744/2/1	-	-	-	-	-	3.9	-	3.9
2744/3/1	-	-	-	-	-	3.9	-	3.9
2584/1/1	-	-	-	-	3.6	-	-	3.6
2584/2/1	-	-	-	-	3.6	-	-	3.6
2584/3/1	-	-	-	-	3.6	-	-	3.6
2581/1/1	-	-	-	-	2.3	-	-	2.3
2581/2/1	-	-	-	-	2.3	-	-	2.3
2581/3/1	-	-	-	-	2.3	-	-	2.3
2581/4/1	-	-	-	-	2.3	-	-	2.3
2581/5/1	-	-	-	-	2.3	-	-	2.3
2791/1/1	-	1.9	-	-	-	-	-	1.9
2791/2/1	-	1.9	-	-	-	-	-	1.9
2742/1/1	-	-	-	-	1.7	-	-	1.7
2742/2/1	-	-	-	-	1.7	-	-	1.7
2643/1/1	-	-	-	-	1.0	-	-	1.0
2643/2/1	-	-	-	-	1.0	-	-	1.0
2761/1/1	-	-	-	-	0.4	0.5	-	0.9
2722/1/1	-	-	-	-	-	-	0.6	0.6
2722/2/1	-	-	-	-	-	-	0.6	0.6
2598/2/1	-	-	-	-	0.6	-	-	0.6
2730/2/1	-	-	-	-	0.5	-	-	0.5
2761/8/1	-	-	-	-	-	0.5	-	0.5
2761/8/2	-	-	-	-	-	0.5	-	0.5
2761/8/3	-	-	-	-	-	0.5	-	0.5
2761/8/4	-	-	-	-	-	0.5	-	0.5
2761/8/5	-	-	-	-	-	0.5	-	0.5
2761/8/6	-	-	-	-	-	0.5	-	0.5
2761/8/7	-	-	-	-	-	0.5	-	0.5
2761/8/8	-	-	-	-	-	0.5	-	0.5
2761/8/9	-	-	-	-	-	0.5	-	0.5
2747/1/1	-	-	-	-	0.4	-	-	0.4
2747/2/1	-	-	-	-	0.4	-	-	0.4
2585/1/1	-	-	-	-	0.1	-	-	0.1
2585/1/2	-	-	-	-	0.1	-	-	0.1
2585/1/3	-	-	-	-	0.1	-	-	0.1
2585/1/4	-	-	-	-	0.1	-	-	0.1
2585/2/1	-	-	-	-	0.1	-	-	0.1
2585/2/2	-	-	-	-	0.1	-	-	0.1
2660/1/1	-	-	-	-	0.1	-	-	0.1
2660/2/1	-	-	-	-	0.1	-	-	0.1
2582/1/1	-	-	-	-	0.1	-	-	0.1
2582/2/1	-	-	-	-	0.1	-	-	0.1
2780/1/1	-	-	0.1	-	-	-	-	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of molluscs for adults based on the 4 high-rate consumers is 18.6 kg y⁻¹

The observed 97.5th percentile rate based on 50 observations is 18.9 kg y⁻¹

Table 6. Adults' consumption rates of marine plants/algae (kg y^{-1}) from the Winfrith aquatic survey area

Person ID number	Bladder wrack	Dulse	Sea beet	Sea lettuce	Sea spaghetti	Sugar kelp	Total
2742/1/1	0.5	-	1.3	-	1.6	0.5	3.9
2742/2/1	0.5	-	1.3	-	1.6	0.5	3.9
2760/1/1	-	0.3	-	0.3	0.3	0.3	1.0
2764/2/1	-	-	-	-	-	0.2	0.2
2764/4/1	-	-	-	-	-	0.2	0.2
2764/5/1	-	-	-	-	-	0.2	0.2
2764/6/1	-	-	-	-	-	0.2	0.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of marine plants/algae for adults based on the 2 high-rate consumers is 3.9 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 3.9 kg y^{-1}

Table 7. Children's and infants' consumption rates of fish (kg y⁻¹) from the Winfrith aquatic survey area**Child age group (6 - 15 years old)**

Person ID number	Age	Bass	Cod	Grey mullet	Mackerel	Monkfish	Pollack	Thornback ray	Total
2761/4/1	12	5.6	2.6	-	6.6	2.6	14.9	-	32.4
2761/5/1	10	5.6	2.6	-	6.6	2.6	14.9	-	32.4
2761/6/1	6	4.2	2.0	-	5.0	2.0	11.2	-	24.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of fish for the child age group based on the 3 high-rate consumers is 29.7 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 32.4 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Bass	Cod	Grey mullet	Mackerel	Monkfish	Pollack	Thornback ray	Total
2761/7/1	2	1.9	0.9	-	2.2	0.9	4.9	-	10.7
2764/7/1	3	-	-	1.6	1.8	-	-	2.1	5.4
2788/3/1	4	1.2	-	-	1.2	-	-	-	2.5
2788/4/1	2	0.8	-	-	0.8	-	-	-	1.6

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of fish for the infant age group based on the 2 high-rate consumers is 8.1 kg y⁻¹

The observed 97.5th percentile rate based on 4 observations is 10.3 kg y⁻¹

Table 8. Children's and infants' consumption rates of crustaceans (kg y⁻¹) from the Winfrith aquatic survey area**Child age group (6 - 15 years old)**

Person ID number	Age	Brown crab	Common lobster	Common prawn	Total
2761/4/1	12	2.9	-	0.2	3.1
2761/5/1	10	2.9	-	0.2	3.1
2761/6/1	6	2.2	-	0.1	2.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of crustaceans for the child age group based on the 3 high-rate consumers is 2.9 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 3.1 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Brown crab	Common lobster	Common prawn	Total
2764/7/1	3	2.6	7.0	-	9.6
2761/7/1	2	1.0	-	0.1	1.0

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of crustaceans for the infant age group based on the high-rate consumer is 9.6 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 9.3 kg y⁻¹

Table 9. Children's and infants' consumption rates of molluscs (kg y^{-1}) from the Winfrith aquatic survey area

Child age group (6 - 15 years old)

No consumption rate data obtained for this group.

Infant age group (0 - 5 years old)

Person ID number	Age	Cockle	Pacific oyster	Razor shell	Scallop	Whelk	Total
2764/7/1	3	0.5	0.5	2.1	5.2	1.2	9.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of molluscs for the infant age group based on the high-rate consumer is 9.4 kg y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Table 10. Children's and infant's consumption rates of marine plants/algae (kg y^{-1}) from the Winfrith aquatic survey area

Child age group (6 - 15 years old)

No consumption rate data obtained for this group.

Infant age group (0 - 5 years old)

Person ID number	Age	Sugar kelp
2764/7/1	3	0.1

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of marine plants/algae for the infant age group based on the high-rate consumer is 0.1 kg y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Table 11. Adults' intertidal occupancy rates ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2667/1/1	Portland Bill and Castle Cove	Angling	84	-	-	-
	Lulworth Cove		-	-	42	-
2617/1/1	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/1/2	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/1/3	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/2/1	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/2/2	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/2/3	Lulworth Cove	Coasteering instructing	60	-	-	-
2617/2/4	Lulworth Cove	Coasteering instructing	60	-	-	-
2579/1/1	Portland Bill	Angling	48	-	-	-
2579/2/1	Portland Bill	Angling	48	-	-	-
2791/1/1	Portland Bill and Kimmeridge Bay	Angling	33	-	-	-
2791/2/1	Portland Bill and Kimmeridge Bay	Angling	33	-	-	-
2742/1/1	Portland Bill, Weymouth Bay and Lulworth Cove	Collecting edible seaweed	13	-	-	-
2742/2/1	Portland Bill, Weymouth Bay and Lulworth Cove	Collecting edible seaweed	13	-	-	-
2760/1/1	Portland Harbour and Lulworth Cove	Collecting edible seaweed	12	-	-	-
2722/1/1	Kimmeridge Bay	Collecting winkles	5	-	-	-
2722/2/1	Kimmeridge Bay	Collecting winkles	5	-	-	-
2741/1/1	Lulworth Cove	Coasteering	3	-	-	-
2741/1/2	Lulworth Cove	Coasteering	3	-	-	-
2741/1/3	Lulworth Cove	Coasteering	3	-	-	-
2741/1/4	Lulworth Cove	Coasteering	3	-	-	-
2741/1/5	Lulworth Cove	Coasteering	3	-	-	-
2741/1/6	Lulworth Cove	Coasteering	3	-	-	-
2741/1/7	Lulworth Cove	Coasteering	3	-	-	-
2741/1/8	Lulworth Cove	Coasteering	3	-	-	-
2741/1/9	Lulworth Cove	Coasteering	3	-	-	-
2741/1/10	Lulworth Cove	Coasteering	3	-	-	-
2783/1/1	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/1/2	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-

Table 11. Adults' intertidal occupancy rates ($h y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2783/1/3	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/2/1	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/2/2	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/2/3	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/2/4	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/2/5	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/4/1	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/4/2	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2783/4/3	Weymouth	Working on the shore	-	387	-	-
			-	-	387	-
2759/1/1	Weymouth, Lodmoor and Greenhill	Walking	-	40	-	-
	Ferry Bridge	Water sports preperation	-	-	-	8
2759/2/1	Weymouth, Lodmoor and Greenhill	Walking	-	40	-	-
2759/3/1	Weymouth, Lodmoor and Greenhill	Walking	-	40	-	-
2759/4/1	Weymouth, Lodmoor and Greenhill	Walking	-	40	-	-
2644/1/1	Castle Cove	Playing	-	36	-	-
2586/19/1	Weymouth	Playing	-	28	-	-
2586/19/2	Weymouth	Playing	-	28	-	-
2586/19/3	Weymouth	Playing	-	28	-	-
2586/19/4	Weymouth	Playing	-	28	-	-
2586/19/5	Weymouth	Playing	-	28	-	-
2586/20/1	Weymouth	Playing	-	28	-	-
2586/20/2	Weymouth	Playing	-	28	-	-
2586/20/3	Weymouth	Playing	-	28	-	-
2586/20/4	Weymouth	Playing	-	28	-	-

Table 11. Adults' intertidal occupancy rates ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2586/20/5	Weymouth	Playing	-	28	-	-
2644/2/1	Castle Cove	Playing	-	27	-	-
2748/1/1	Castle Cove	Playing	-	26	-	-
2748/4/1	Castle Cove	Playing	-	13	-	-
2586/13/1	Weymouth	Playing	-	5	-	-
2586/14/1	Weymouth	Playing	-	5	-	-
2586/15/1	Weymouth	Playing	-	5	-	-
2586/16/1	Weymouth	Playing	-	5	-	-
2586/17/1	Weymouth	Playing	-	5	-	-
2586/18/1	Weymouth	Playing	-	5	-	-
2631/1/1	Weymouth	Lifeguard duties	-	-	1038	-
2631/1/2	Weymouth	Lifeguard duties	-	-	1038	-
2631/2/1	Weymouth	Lifeguard duties	-	-	1038	-
2631/2/2	Weymouth	Lifeguard duties	-	-	1038	-
2584/1/1	Castletown	Dog walking	-	-	730	-
2669/1/1	Bowleaze	Angling	-	-	417	-
2631/3/1	Weymouth	Lifeguard duties	-	-	285	-
2631/6/1	Weymouth	Lifeguard duties	-	-	285	-
2631/7/1	Weymouth	Lifeguard duties	-	-	285	-
2728/1/1	Kimmeridge Bay	Beach warden	-	-	228	-
2728/1/2	Kimmeridge Bay	Beach warden	-	-	228	-
2728/1/3	Kimmeridge Bay	Beach warden	-	-	228	-
2728/1/4	Kimmeridge Bay	Beach warden	-	-	228	-
2629/1/1	Lodmoor	Dog walking	-	-	209	-
2762/1/1	Throughout the survey area	Rescue duties	-	-	104	-
2762/1/2	Throughout the survey area	Rescue duties	-	-	104	-
2671/1/1	Ringstead Bay, Lulworth Cove and Kimmeridge Bay	Dog walking	-	-	48	-
2671/2/1	Ringstead Bay, Lulworth Cove and Kimmeridge Bay	Dog walking	-	-	48	-
2691/1/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2691/2/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2691/3/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2691/4/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-

Table 11. Adults' intertidal occupancy rates ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2691/4/2	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2691/4/3	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2691/4/4	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Walking	-	-	27	-
2730/1/1	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/2	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/3	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/4	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/5	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/6	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/7	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/8	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/9	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/10	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/11	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/12	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/13	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/14	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/15	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/16	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/17	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/18	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/19	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/20	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/21	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/22	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/23	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/24	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/25	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/26	Throughout the survey area	Rescue duties	-	-	20	-
2730/1/27	Throughout the survey area	Rescue duties	-	-	20	-
2730/2/1	Throughout the survey area	Rescue duties	-	-	20	-
2728/2/1	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/2	Kimmeridge Bay	Beach combing	-	-	12	-

Table 11. Adults' intertidal occupancy rates ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2728/2/3	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/4	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/5	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/6	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/7	Kimmeridge Bay	Beach combing	-	-	12	-
2728/2/8	Kimmeridge Bay	Beach combing	-	-	12	-
2717/1/1	Ringstead Bay	Walking	-	-	4	-
2717/2/1	Ringstead Bay	Walking	-	-	4	-
2631/4/1	Greenhill and Lodmoor	Lifeguard duties	-	-	-	1038
2631/5/1	Greenhill and Lodmoor	Lifeguard duties	-	-	-	1038
2652/1/1	Greenhill and Lodmoor	Dog walking	-	-	-	548
2654/2/1	Greenhill and Lodmoor	Walking	-	-	-	497
2654/1/1	Greenhill and Lodmoor	Walking	-	-	-	444
2628/1/1	Lodmoor	Dog walking	-	-	-	274
2628/2/1	Lodmoor	Dog walking	-	-	-	274
2632/1/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	74
2635/1/1	Lodmoor and Bowleaze Cove	Jogging	-	-	-	70
2651/1/1	Greenhill and Lodmoor	Walking	-	-	-	63
2633/1/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	61
2785/1/1	Greenhill	Sitting on the beach	-	-	-	25
2784/1/1	Lodmoor	Sitting on the beach	-	-	-	25
2592/1/1	Ferry Bridge	Water sports preperation	-	-	-	24
2592/2/1	Ferry Bridge	Water sports preperation	-	-	-	24
2784/2/1	Greenhill	Sitting on the beach	-	-	-	23
2784/3/1	Greenhill	Sitting on the beach	-	-	-	23
2659/3/1	Greenhill	Sitting on the beach	-	-	-	18
2659/4/1	Greenhill	Sitting on the beach	-	-	-	18
2659/5/1	Greenhill	Sitting on the beach	-	-	-	18
2634/1/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	17
2785/2/1	Greenhill	Sitting on the beach	-	-	-	13
2785/3/1	Greenhill	Sitting on the beach	-	-	-	13
2659/1/1	Greenhill	Sitting on the beach	-	-	-	12
2659/2/1	Greenhill	Sitting on the beach	-	-	-	12
2659/6/1	Greenhill	Sitting on the beach	-	-	-	12
2659/7/1	Greenhill	Sitting on the beach	-	-	-	12

Table 11. Adults' intertidal occupancy rates ($h y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Rock	Sand	Sand and stones	Stones
2594/1/1	Ferry Bridge	Water sports preparation	-	-	-	6
2594/2/1	Ferry Bridge	Water sports preparation	-	-	-	6
2594/3/1	Ferry Bridge	Water sports preparation	-	-	-	6
2590/1/1	Ferry Bridge	Water sports preparation	-	-	-	2
2630/1/1	Lodmoor and Bowleaze Cove	Sitting on the beach	-	-	-	2
2630/2/1	Lodmoor and Bowleaze Cove	Sitting on the beach	-	-	-	2
2656/1/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	1
2656/2/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	1
2656/3/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	1
2656/4/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	1
2656/5/1	Greenhill and Lodmoor	Sitting on the beach	-	-	-	1

Notes

Emboldened observations are the high-rate individuals

The mean intertidal occupancy rate over rock for adults based on 12 high-rate observations is $55 h y^{-1}$

The observed 97.5th percentile rate based on 27 observations is $68 h y^{-1}$

The mean intertidal occupancy rate over sand for adults based on 11 high-rate observations is $387 h y^{-1}$

The observed 97.5th percentile rate based on 35 observations is $387 h y^{-1}$

The mean intertidal occupancy rate over sand and stones for adults based on 17 high-rate observations is $562 h y^{-1}$

The observed 97.5th percentile rate based on 75 observations is $1038 h y^{-1}$

The mean intertidal occupancy rate over stones for adults based on 5 high-rate observations is $713 h y^{-1}$

The observed 97.5th percentile rate based on 39 observations is $1038 h y^{-1}$

Table 12. Children's and infants' intertidal occupancy rates ($h y^{-1}$) in the Winfrith aquatic survey area

Child age group (6 - 15 years old)

Person ID number	Age	Location	Activity	Sand	Sand and stones	Stones
2783/3/1	15	Weymouth	Working on the shore (in the summer)	213	-	-
				-	213	-
2644/3/1	10	Castle Cove	Playing	27	-	-
2644/4/1	13	Castle Cove	Playing	27	-	-
2748/2/1	9	Castle Cove	Playing	26	-	-
2748/3/1	7	Castle Cove	Playing	26	-	-
2586/1/1	10	Weymouth	Playing	5	-	-
2586/2/1	10	Weymouth	Playing	5	-	-
2586/3/1	11	Weymouth	Playing	5	-	-
2586/4/1	11	Weymouth	Playing	5	-	-
2586/5/1	12	Weymouth	Playing	5	-	-
2586/6/1	12	Weymouth	Playing	5	-	-
2586/7/1	13	Weymouth	Playing	5	-	-
2586/8/1	13	Weymouth	Playing	5	-	-
2586/9/1	14	Weymouth	Playing	5	-	-
2586/10/1	14	Weymouth	Playing	5	-	-
2586/11/1	15	Weymouth	Playing	5	-	-
2586/12/1	15	Weymouth	Playing	5	-	-
2632/2/1	9	Greenhill and Lodmoor	Playing and sitting on the beach	-	-	74
2632/3/1	7	Greenhill and Lodmoor	Playing and sitting on the beach	-	-	74

Notes

Emboldened observations are the high-rate individuals

The mean intertidal occupancy rate over sand for the child age group based on the high-rate observation is $213 h y^{-1}$

The observed 97.5th percentile rate based on 17 observations is $139 h y^{-1}$

The mean intertidal occupancy rate over sand and stones for the child age group based on the high-rate observation is $213 h y^{-1}$

The observed 97.5th percentile is not applicable for 1 observation

The mean intertidal occupancy rate over stones for the child age group based on 2 high-rate observations is $74 h y^{-1}$

The observed 97.5th percentile rate based on 2 observations is $74 h y^{-1}$

Infant age group (0 - 5 years old)

No occupancy rate data was obtained for infants.

Table 13. Gamma dose rate measurements over intertidal substrates ($\mu\text{Gy h}^{-1}$) in the Winfrith aquatic survey area

Location	National Grid Reference	Substrate	Gamma dose rate at 1 metre ^a
Castletown	SY 687 743	Sand and stones	0.061
Castle Cove	SY 673 772	Sand and stones	0.068
Weymouth	SY 680 793	Sand and stones	0.058
Lodmoor	SY 688 807	Stones	0.056
Lodmoor	SY 688 807	Sand and stones	0.058
Ringstead Bay	SY 749 813	Stones	0.056
Lulworth Cove	SY 824 799	Sand and stones	0.059
Kimmeridge Bay	SY 908 791	Sand and stones	0.065

Notes

^a These measurements have not been adjusted for background dose rates

Table 14. Adults' handling rates of fishing gear and sediment (h y^{-1}) in the Winfrith aquatic survey area

Person ID number	Location	Activity	Fishing gear	Sediment
2744/1/1	Throughout the survey area	Gill netting and potting	1278	-
2744/3/1	Throughout the survey area	Gill netting and potting	1278	-
2744/4/1	Throughout the survey area	Gill netting and potting	1278	-
2760/1/1	Portland Harbour	Potting	261	-
2729/1/1	Kimmeridge Bay	Potting	228	-
2729/2/1	Kimmeridge Bay	Potting	228	-
2685/1/1	Throughout the survey area	Trawling	156	-
2685/2/1	Throughout the survey area	Trawling	156	-
2764/1/1	East Fleet	Working on a boat	80	-
2764/2/1	East Fleet	Working on a boat	80	-
2764/3/1	East Fleet	Working on a boat	80	-
2722/1/1	Kimmeridge Bay	Collecting winkles	-	5
2722/2/1	Kimmeridge Bay	Collecting winkles	-	5

Notes

Emboldened observations are the high-rate individuals

The mean handling rate of fishing gear for adults based on 3 high-rate observations is 1278 h y^{-1}

The observed 97.5th percentile rate based on 11 observations is 1278 h y^{-1}

The mean handling rate of sediments for adults based on 2 high-rate observations is 5 h y^{-1}

The observed 97.5th percentile rate based on 2 observations is 5 h y^{-1}

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2600/2/2	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/2/6	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/1/1	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/2/1	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/2/4	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/2/5	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/1/2	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2600/2/3	Portland Harbour and Ferry Bridge	Teaching water sports	836	-
2642/1/1	Throughout the survey area	Sub-aqua diving instructing	489	-
		Travelling to dive site	-	521
2642/2/1	Throughout the survey area	Sub-aqua diving instructing	489	-
		Travelling to dive site	-	521
2638/1/1	Throughout the survey area	Jetskiing instructing	474	-
2638/2/1	Throughout the survey area	Jetskiing instructing	474	-
2595/1/1	Ferry Bridge	Paddleboarding	459	-
2595/3/1	Ferry Bridge	Paddleboarding	459	-
2785/1/1	Throughout the survey area	Swimming	392	-
2784/1/1	Lodmoor	Swimming	392	-
2687/1/1	Throughout the survey area	Kayaking	390	-
2638/3/1	Throughout the survey area	Jetskiing	384	-
2592/1/1	Ferry Bridge	Windsurfing	360	-
2742/1/1	Throughout the survey area	Kayaking, sub-aqua diving, collecting scallops whilst diving and paddleboarding	332	-
	Portland Harbour, Weymouth Harbour, Ringstead Bay and Lulworth Banks	Charter boat duties and being on a boat	-	701
2642/3/1	Throughout the survey area	Sub-aqua diving	294	-
		Travelling to dive site	-	521
2642/4/1	Throughout the survey area	Sub-aqua diving	294	-
		Travelling to dive site	-	521
2642/5/1	Throughout the survey area	Sub-aqua diving	294	-
		Travelling to dive site	-	521
2642/6/1	Throughout the survey area	Sub-aqua diving	294	-
		Travelling to dive site	-	521
2600/3/1	Portland Harbour and Ferry Bridge	Windsurfing, paddleboarding, kitesurfing	280	-
2600/4/1	Portland Harbour and Ferry Bridge	Windsurfing, paddleboarding, kitesurfing	280	-
2742/2/1	Throughout the survey area	Kayaking, sub-aqua diving, collecting scallops whilst diving and paddleboarding	258	-
	Portland Harbour, Weymouth Harbour, Ringstead Bay and Lulworth Banks	Charter boat duties and travelling to dive site	-	701
2631/4/1	Greenhill and Lodmoor	Swimming	220	-
2631/5/1	Greenhill and Lodmoor	Swimming	220	-
2719/1/1	Kimmeridge Bay	Surfing	195	-
2785/2/1	Throughout the survey area	Kayaking	196	-
2785/3/1	Throughout the survey area	Kayaking	196	-
2719/1/2	Kimmeridge Bay	Surfing	195	-
2719/1/3	Kimmeridge Bay	Surfing	195	-
2671/1/1	Ringstead Bay, Lulworth Cove and Kimmeridge Bay	Kayaking and swimming	192	-
2671/2/1	Ringstead Bay, Lulworth Cove and Kimmeridge Bay	Kayaking and swimming	192	-

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2759/1/1	Ferry Bridge	Kitesurfing	184	-
2642/7/1	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/2	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/3	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/4	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/5	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/6	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/7	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/8	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/7/9	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2642/8/1	Throughout the survey area	Sub-aqua diving	156	-
		Travelling to dive site	-	209
2630/1/1	Lodmoor and Bowleaze Cove	Swimming	156	-
2630/2/1	Lodmoor and Bowleaze Cove	Swimming	156	-
2643/1/1	Lulworth Banks	Sub-aqua diving and collecting scallops whilst diving	150	-
2643/4/1	Lulworth Banks	Sub-aqua diving	150	-
2643/4/2	Lulworth Banks	Sub-aqua diving	150	-
2643/4/3	Lulworth Banks	Sub-aqua diving	150	-
2617/1/1	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/1/2	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/1/3	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/2/1	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/2/2	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/2/3	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2617/2/4	Lulworth Cove	Swimming, kayaking, paddleboarding and snorkelling	150	-
2592/2/1	Ferry Bridge	Windsurfing	144	-
2633/1/1	Greenhill and Lodmoor	Swimming	137	-
2580/1/1	Throughout the survey area	Sub-aqua diving	120	-
		Charter boat duties	-	175
2580/2/1	Throughout the survey area	Sub-aqua diving	120	-
		Charter boat duties	-	175
2791/1/1	Castletown and Ferry Bridge	Spear fishing and collecting mussels	118	-
2791/2/1	Castletown and Ferry Bridge	Spear fishing and collecting mussels	118	-
2632/1/1	Greenhill and Lodmoor	Paddleboarding and swimming	116	-

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2588/1/1	Lulworth Banks	Sub-aqua diving	104	-
	Throughout the survey area	Charter boat duties	-	209
2634/1/1	Greenhill and Lodmoor	Swimming	78	-
2694/1/1	Portland Harbour, Ferry Bridge, Ringstead Bay and Weymouth Bay	Paddleboarding and kayaking	76	-
2694/2/1	Portland Harbour, Ferry Bridge, Ringstead Bay and Weymouth Bay	Paddleboarding and kayaking	76	-
2724/1/1	Kimmeridge Bay	Surfing	69	-
2724/2/1	Kimmeridge Bay	Surfing	69	-
2656/1/1	Greenhill and Lodmoor	Swimming	57	-
2656/2/1	Greenhill and Lodmoor	Swimming	57	-
2656/3/1	Greenhill and Lodmoor	Swimming	57	-
2656/4/1	Greenhill and Lodmoor	Swimming	57	-
2656/5/1	Greenhill and Lodmoor	Swimming	57	-
2730/2/1	Weymouth Bay and Weymouth Harbour	Swimming and kayaking	56	-
	Throughout the survey area	Rescue duties	-	20
2631/1/1	Weymouth	Swimming	55	-
2631/1/2	Weymouth	Swimming	55	-
2631/2/1	Weymouth	Swimming	55	-
2631/2/2	Weymouth	Swimming	55	-
2594/1/1	Ferry Bridge	Kitesurfing	54	-
2594/2/1	Ferry Bridge	Kitesurfing	54	-
2594/3/1	Ferry Bridge	Kitesurfing	54	-
2654/1/1	Greenhill and Lodmoor	Swimming	52	-
2585/1/1	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2585/1/2	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2585/1/3	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2585/1/4	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2585/2/1	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2585/2/2	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	52	-
		Travelling to dive site	-	235
2586/19/1	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/19/2	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/19/3	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/19/4	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/19/5	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2586/20/1	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/20/2	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/20/3	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/20/4	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2586/20/5	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	48	-
	Weymouth Bay	Sailing and rowing	-	166
2782/1/1	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/2	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/3	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/4	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/5	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/6	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/7	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/8	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/9	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/10	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/11	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/12	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/1/13	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/1	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2782/2/2	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/3	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/4	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/5	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/6	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/7	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/8	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/9	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/10	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/11	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2782/2/12	Portland Harbour and Ferry Bridge	Paddleboarding and kayaking	44	-
		Sailing	-	523
2595/2/1	Ferry Bridge	Paddleboarding	42	-
2728/1/1	Kimmeridge Bay	Snorkelling	42	-
2728/1/2	Kimmeridge Bay	Snorkelling	42	-
2728/1/3	Kimmeridge Bay	Snorkelling	42	-
2728/1/4	Kimmeridge Bay	Snorkelling	42	-
2581/1/1	Throughout the survey area	Sub-aqua diving and collecting scallops whilst diving	29	-
		Travelling to dive site	-	88
2593/1/1	Ferry Bridge	Windsurfing	23	-
2631/3/1	Weymouth	Swimming	15	-
2631/6/1	Weymouth	Swimming	15	-
2631/7/1	Weymouth	Swimming	15	-
2590/1/1	Ferry Bridge	Kitesurfing	12	-
2741/1/1	Lulworth Cove	Swimming and kayaking	10	-
2741/1/2	Lulworth Cove	Swimming and kayaking	10	-
2741/1/3	Lulworth Cove	Swimming and kayaking	10	-
2741/1/4	Lulworth Cove	Swimming and kayaking	10	-
2741/1/5	Lulworth Cove	Swimming and kayaking	10	-
2741/1/6	Lulworth Cove	Swimming and kayaking	10	-
2741/1/7	Lulworth Cove	Swimming and kayaking	10	-
2741/1/8	Lulworth Cove	Swimming and kayaking	10	-
2741/1/9	Lulworth Cove	Swimming and kayaking	10	-

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2741/1/10	Lulworth Cove	Swimming and kayaking	10	-
2586/13/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2586/14/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2586/15/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2586/16/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2586/17/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2586/18/1	Weymouth Bay and Weymouth	Swimming and windsurfing and kayaking	9	-
	Weymouth Bay	Rowing and sailing	-	30
2644/2/1	Castle Cove	Swimming	9	-
2723/1/1	Kimmeridge Bay	Windsurfing	8	-
2659/1/1	Greenhill	Swimming	5	-
2659/2/1	Greenhill	Swimming	5	-
2659/6/1	Greenhill	Swimming	5	-
2659/7/1	Greenhill	Swimming	5	-
2691/1/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Swimming	1	-
2691/2/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Swimming	1	-
2691/3/1	Weymouth, Ringstead Bay, Lulworth Cove and Worbarrow Bay	Swimming	1	-
2643/3/1	Throughout the survey area	Commercial fishing (rod and line)	-	2496
2643/3/2	Throughout the survey area	Commercial fishing (rod and line)	-	2496
2643/3/3	Throughout the survey area	Commercial fishing (rod and line)	-	2496
2643/3/4	Throughout the survey area	Commercial fishing (rod and line)	-	2496
2598/1/1	Throughout the survey area	Powerboat instructing	-	2304
2598/1/2	Throughout the survey area	Powerboat instructing	-	2304
2598/1/3	Throughout the survey area	Powerboat instructing	-	2304
2598/2/1	Throughout the survey area	Powerboat instructing	-	2304
2744/1/1	Throughout the survey area	Gill netting and potting	-	2113
2744/3/1	Throughout the survey area	Gill netting and potting	-	2113
2744/4/1	Throughout the survey area	Gill netting and potting	-	2113
2749/1/1	Throughout the survey area	Commercial boat angling	-	2086
2749/2/1	Throughout the survey area	Commercial boat angling	-	2086
2685/1/1	Throughout the survey area	Trawling	-	1877
2685/2/1	Throughout the survey area	Trawling	-	1877
2637/1/1	Throughout the survey area	Charter boat duties and boat maintenance	-	1800
2737/1/1	Throughout the survey area	Charter boat duties	-	1440
2737/2/1	Throughout the survey area	Charter boat duties	-	1440
2734/2/1	Throughout the survey area and Weymouth Harbour	Working on a boat	-	960
2734/2/2	Throughout the survey area and Weymouth Harbour	Working on a boat	-	960
2734/2/3	Throughout the survey area and Weymouth Harbour	Working on a boat	-	960
2734/2/4	Throughout the survey area and Weymouth Harbour	Working on a boat	-	960
2598/3/1	Throughout the survey area	Sailing	-	960
2598/3/2	Throughout the survey area	Sailing	-	960

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2598/3/3	Throughout the survey area	Sailing	-	960
2598/3/4	Throughout the survey area	Sailing	-	960
2612/1/1	Throughout the survey area	Charter boat duties	-	850
2596/1/1	Throughout the survey area	Charter boat duties	-	810
2738/1/1	Throughout the survey area	Charter boat duties	-	704
2668/1/1	Weymouth Harbour	Working on pontoons and being on a boat	-	652
2668/1/2	Weymouth Harbour	Working on pontoons and being on a boat	-	652
2668/1/3	Weymouth Harbour	Working on pontoons and being on a boat	-	652
2668/2/1	Weymouth Harbour	Working on pontoons and being on a boat	-	652
2760/1/1	Portland Harbour	Potting and working on a boat	-	652
2684/1/1	Throughout the survey area	Charter boat duties	-	611
2684/2/1	Throughout the survey area	Charter boat duties	-	611
2684/3/1	Throughout the survey area	Charter boat duties	-	611
2684/4/1	Throughout the survey area	Charter boat duties	-	611
2639/1/1	Weymouth Harbour	Ferry duties	-	421
2639/1/2	Weymouth Harbour	Ferry duties	-	421
2639/1/3	Weymouth Harbour	Ferry duties	-	421
2639/1/4	Weymouth Harbour	Ferry duties	-	421
2693/11/1	Weymouth Bay	Sailing	-	328
2693/11/2	Weymouth Bay	Sailing	-	328
2693/11/3	Weymouth Bay	Sailing	-	328
2693/11/4	Weymouth Bay	Sailing	-	328
2693/11/5	Weymouth Bay	Sailing	-	328
2693/12/1	Weymouth Bay	Sailing	-	328
2693/12/2	Weymouth Bay	Sailing	-	328
2693/12/3	Weymouth Bay	Sailing	-	328
2693/12/4	Weymouth Bay	Sailing	-	328
2693/12/5	Weymouth Bay	Sailing	-	328
2668/3/1	Weymouth Harbour	Working on pontoons and being on a boat	-	326
2668/4/1	Weymouth Harbour	Working on pontoons and being on a boat	-	326
2668/4/2	Weymouth Harbour	Working on pontoons and being on a boat	-	326
2640/1/1	Weymouth Bay	Sailing	-	313
2729/1/1	Kimmeridge Bay	Potting	-	304
2729/2/1	Kimmeridge Bay	Potting	-	304
2783/1/1	Weymouth	Working on a boat	-	287
2783/1/2	Weymouth	Working on a boat	-	287
2783/1/3	Weymouth	Working on a boat	-	287
2783/2/1	Weymouth	Working on a boat	-	287
2783/2/2	Weymouth	Working on a boat	-	287
2783/2/3	Weymouth	Working on a boat	-	287
2783/2/4	Weymouth	Working on a boat	-	287
2783/2/5	Weymouth	Working on a boat	-	287
2783/4/1	Weymouth	Working on a boat	-	287
2783/4/2	Weymouth	Working on a boat	-	287
2783/4/3	Weymouth	Working on a boat	-	287
2661/1/1	Weymouth Bay to Lulworth Cove	Charter boat duties	-	254

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2637/4/1	Throughout the survey area	Boat angling	-	216
2637/4/2	Throughout the survey area	Boat angling	-	216
2637/4/3	Throughout the survey area	Boat angling	-	216
2637/4/4	Throughout the survey area	Boat angling	-	216
2637/4/5	Throughout the survey area	Boat angling	-	216
2637/4/6	Throughout the survey area	Boat angling	-	216
2637/4/7	Throughout the survey area	Boat angling	-	216
2637/4/8	Throughout the survey area	Boat angling	-	216
2637/4/9	Throughout the survey area	Boat angling	-	216
2637/4/10	Throughout the survey area	Boat angling	-	216
2660/1/1	Castle Cove and Weymouth Bay	Sailing	-	209
2667/2/1	Weymouth Bay	Boat angling	-	180
2662/1/1	Weymouth Bay	Charter boat duties	-	176
2662/2/1	Weymouth Bay	Charter boat duties	-	176
2612/2/1	Throughout the survey area	Boat angling	-	153
2587/1/1	Throughout the survey area	Boat angling	-	140
2584/1/1	Castletown	Boat angling	-	112
2584/2/1	Castletown	Boat angling	-	112
2764/1/1	East Fleet	Working on a boat	-	100
2764/2/1	East Fleet	Working on a boat	-	100
2764/3/1	East Fleet	Working on a boat	-	100
2762/1/1	Throughout the survey area	Working on a boat	-	95
2762/1/2	Throughout the survey area	Working on a boat	-	95
2582/1/1	Throughout the survey area	Sailing	-	60
2732/1/1	Throughout the survey area	Boat angling	-	48
2734/1/1	Weymouth Bay	Powerboating	-	41
2734/1/2	Weymouth Bay	Powerboating	-	41
2734/1/3	Weymouth Bay	Powerboating	-	41
2734/1/4	Weymouth Bay	Powerboating	-	41
2734/1/5	Weymouth Bay	Powerboating	-	41
2734/1/6	Weymouth Bay	Powerboating	-	41
2734/1/7	Weymouth Bay	Powerboating	-	41
2734/1/8	Weymouth Bay	Powerboating	-	41
2734/1/9	Weymouth Bay	Powerboating	-	41
2584/3/1	Castletown	Boat angling	-	38
2597/1/1	Throughout the survey area	Boat angling	-	35
2597/2/1	Throughout the survey area	Boat angling	-	35
2597/3/1	Throughout the survey area	Boat angling	-	35
2597/4/1	Throughout the survey area	Boat angling	-	35
2730/1/1	Throughout the survey area	Rescue duties	-	20
2730/1/2	Throughout the survey area	Rescue duties	-	20
2730/1/3	Throughout the survey area	Rescue duties	-	20
2730/1/4	Throughout the survey area	Rescue duties	-	20
2730/1/5	Throughout the survey area	Rescue duties	-	20
2730/1/6	Throughout the survey area	Rescue duties	-	20
2730/1/7	Throughout the survey area	Rescue duties	-	20

Table 15. Adults' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Person ID number	Location	Activity	In water	On water
2730/1/8	Throughout the survey area	Rescue duties	-	20
2730/1/9	Throughout the survey area	Rescue duties	-	20
2730/1/10	Throughout the survey area	Rescue duties	-	20
2730/1/11	Throughout the survey area	Rescue duties	-	20
2730/1/12	Throughout the survey area	Rescue duties	-	20
2730/1/13	Throughout the survey area	Rescue duties	-	20
2730/1/14	Throughout the survey area	Rescue duties	-	20
2730/1/15	Throughout the survey area	Rescue duties	-	20
2730/1/16	Throughout the survey area	Rescue duties	-	20
2730/1/17	Throughout the survey area	Rescue duties	-	20
2730/1/18	Throughout the survey area	Rescue duties	-	20
2730/1/19	Throughout the survey area	Rescue duties	-	20
2730/1/20	Throughout the survey area	Rescue duties	-	20
2730/1/21	Throughout the survey area	Rescue duties	-	20
2730/1/22	Throughout the survey area	Rescue duties	-	20
2730/1/23	Throughout the survey area	Rescue duties	-	20
2730/1/24	Throughout the survey area	Rescue duties	-	20
2730/1/25	Throughout the survey area	Rescue duties	-	20
2730/1/26	Throughout the survey area	Rescue duties	-	20
2730/1/27	Throughout the survey area	Rescue duties	-	20
2748/1/1	Castle Cove	Paddling	-	13
2761/1/1	Balaclava Bay, Portland Harbour and Weymouth Bay	Charter boat duties	-	9
2761/2/1	Balaclava Bay, Portland Harbour and Weymouth Bay	Charter boat duties	-	9
2748/4/1	Castle Cove	Paddling	-	7

Table 16. Children's and infants' occupancy rates in and on water ($h\ y^{-1}$) in the Winfrith aquatic survey area

Child age group (6 - 15 years old)

Person ID number	Age	Location	Activity	In water	On water
2632/2/1	9	Greenhill and Lodmoor	Paddleboarding and swimming	116	-
2632/3/1	7	Greenhill and Lodmoor	Paddleboarding and swimming	116	-
2586/1/1	10	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/2/1	10	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/3/1	11	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/4/1	11	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/5/1	12	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/6/1	12	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/7/1	13	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/8/1	13	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/9/1	14	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/10/1	14	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/11/1	15	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2586/12/1	15	Weymouth Bay and Weymouth	Kayaking, windsurfing and swimming	9	-
		Weymouth Bay	Sailing and rowing	-	30
2644/3/1	10	Castle Cove	Swimming	9	-
2644/4/1	13	Castle Cove	Swimming	9	-
2784/3/1	15	Weymouth	Working on a boat (in summer)	-	287
2693/1/1	11	Weymouth Bay	Sailing	-	39
2693/2/1	12	Weymouth Bay	Sailing	-	39
2693/3/1	13	Weymouth Bay	Sailing	-	39
2693/4/1	14	Weymouth Bay	Sailing	-	39
2693/5/1	15	Weymouth Bay	Sailing	-	39
2693/6/1	11	Weymouth Bay	Sailing	-	39
2693/7/1	12	Weymouth Bay	Sailing	-	39
2693/8/1	13	Weymouth Bay	Sailing	-	39
2693/9/1	14	Weymouth Bay	Sailing	-	39
2693/10/1	15	Weymouth Bay	Sailing	-	39
2748/2/1	9	Castle Cove	Paddling	-	13
2748/3/1	7	Castle Cove	Paddling	-	13

Infant age group (0 - 5 years old)

No occupancy rates for infants were identified during the survey

Table 17. Adults' consumption rates of green vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Artichoke	Broccoli	Cabbage	Courgette	Cucumber	Herbs	Kale	Lettuce	Spinach	Total
2780/3/1	0.4	-	-	-	-	-	-	-	2.2	2.7
2780/5/1	0.4	-	-	-	-	-	-	-	2.2	2.7
2624/1/1	-	-	2.1	-	-	-	-	0.5	-	2.6
2624/2/1	-	-	2.1	-	-	-	-	0.5	-	2.6
2624/3/1	-	-	2.1	-	-	-	-	0.5	-	2.6
2624/4/1	-	-	2.1	-	-	-	-	0.5	-	2.6
2671/1/1	-	-	-	2.0	-	0.5	-	-	-	2.5
2671/2/1	-	-	-	2.0	-	0.5	-	-	-	2.5
2673/1/1	-	-	-	1.2	-	0.2	-	-	-	1.5
2673/2/1	-	-	-	1.2	-	0.2	-	-	-	1.5
2780/6/1	0.1	-	-	-	-	-	-	-	0.7	0.8
2751/1/1	0.7	-	-	-	-	-	-	-	-	0.7
2751/2/1	0.7	-	-	-	-	-	-	-	-	0.7
2751/3/1	0.7	-	-	-	-	-	-	-	-	0.7
2751/4/1	0.7	-	-	-	-	-	-	-	-	0.7
2780/4/1	0.1	-	-	-	-	-	-	-	0.3	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for adults based on the 16 high-rate consumers is 17.7 kg y⁻¹

The observed 97.5th percentile rate based on 52 observations is 28.5 kg y⁻¹

Table 18. Adults' consumption rates of other vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Aubergine	Broad bean	Chilli pepper	French bean	Pea	Pepper	Runner bean	Squash	Sweetcorn	Tomato	Total
2757/1/1	-	6.0	-	6.0	-	-	6.0	-	-	30.0	47.9
2757/2/1	-	6.0	-	6.0	-	-	6.0	-	-	30.0	47.9
2786/1/1	-	18.2	-	-	-	-	27.2	-	-	-	45.4
2786/2/1	-	18.2	-	-	-	-	27.2	-	-	-	45.4
2760/1/1	-	-	-	-	-	-	13.0	-	-	19.8	32.8
2760/2/1	-	-	-	-	-	-	13.0	-	-	19.8	32.8
2751/1/1	-	2.1	-	1.4	-	1.0	2.6	-	-	22.5	29.5
2751/2/1	-	2.1	-	1.4	-	1.0	2.6	-	-	22.5	29.5
2751/3/1	-	2.1	-	1.4	-	1.0	2.6	-	-	22.5	29.5
2751/4/1	-	2.1	-	1.4	-	1.0	2.6	-	-	22.5	29.5
2620/1/1	1.8	-	2.0	-	-	6.1	14.1	-	-	4.8	28.7
2620/2/1	1.8	-	2.0	-	-	6.1	14.1	-	-	4.8	28.7
2704/1/1	-	12.5	-	-	-	-	12.5	-	-	-	25.0
2704/2/1	-	12.5	-	-	-	-	12.5	-	-	-	25.0
2787/1/1	-	-	-	-	-	-	20.4	-	-	-	20.4
2787/2/1	-	-	-	-	-	-	20.4	-	-	-	20.4
2789/1/1	-	-	-	-	-	-	16.7	-	-	2.7	19.4
2789/2/1	-	-	-	-	-	-	16.7	-	-	2.7	19.4
2750/1/1	-	-	0.4	0.9	3.2	1.6	2.4	-	-	10.0	18.5
2750/2/1	-	-	0.4	0.9	3.2	1.6	2.4	-	-	10.0	18.5
2717/1/1	-	-	-	-	-	-	17.7	-	-	-	17.7
2717/2/1	-	-	-	-	-	-	17.7	-	-	-	17.7
2698/1/1	4.6	-	-	0.5	-	-	-	-	-	12.6	17.7
2698/2/1	4.6	-	-	0.5	-	-	-	-	-	12.6	17.7
2657/1/1	-	-	-	-	-	-	5.1	-	-	10.8	15.9
2657/2/1	-	-	-	-	-	-	5.1	-	-	10.8	15.9
2671/1/1	-	-	-	-	-	-	7.5	-	-	7.5	15.0
2671/2/1	-	-	-	-	-	-	7.5	-	-	7.5	15.0
2689/1/1	-	-	-	2.3	-	-	2.3	-	2.8	4.5	11.8
2689/2/1	-	-	-	2.3	-	-	2.3	-	2.8	4.5	11.8
2672/1/1	-	-	-	-	-	0.7	1.3	-	0.7	9.0	11.7
2672/2/1	-	-	-	-	-	0.7	1.3	-	0.7	9.0	11.7
2747/2/1	-	-	-	-	-	-	10.2	-	-	-	10.2
2653/1/1	-	-	-	-	-	-	-	-	-	5.4	5.4
2653/2/1	-	-	-	-	-	-	-	-	-	5.4	5.4
2673/1/1	-	1.1	-	-	-	-	1.1	0.7	-	2.3	5.2

Table 18. Adults' consumption rates of other vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Aubergine	Broad bean	Chilli pepper	French bean	Pea	Pepper	Runner bean	Squash	Sweetcorn	Tomato	Total
2673/2/1	-	1.1	-	-	-	-	1.1	0.7	-	2.3	5.2
2780/1/1	-	-	-	-	-	-	4.5	-	0.3	-	4.8
2780/2/1	-	-	-	-	-	-	4.5	-	0.3	-	4.8
2780/3/1	-	-	-	-	-	-	4.5	-	0.3	-	4.8
2780/5/1	-	-	-	-	-	-	4.5	-	0.3	-	4.8
2614/1/1	-	0.6	-	0.6	-	0.5	-	-	-	2.5	4.1
2614/2/1	-	0.6	-	0.6	-	0.5	-	-	-	2.5	4.1
2790/1/1	-	-	-	-	-	-	-	-	-	3.3	3.3
2790/2/1	-	-	-	-	-	-	-	-	-	3.3	3.3
2753/1/1	2.0	-	0.1	-	-	1.0	-	-	-	-	3.1
2753/2/1	2.0	-	0.1	-	-	1.0	-	-	-	-	3.1
2626/1/1	-	-	-	-	-	-	3.1	-	-	-	3.1
2626/2/1	-	-	-	-	-	-	3.1	-	-	-	3.1
2672/4/1	-	-	-	-	-	0.2	0.3	-	0.2	2.3	3.0
2672/7/1	-	-	-	-	-	0.2	0.3	-	0.2	2.3	3.0
2672/8/1	-	-	-	-	-	0.2	0.3	-	0.2	2.3	3.0
2672/9/1	-	-	-	-	-	0.2	0.3	-	0.2	2.3	3.0
2672/10/1	-	-	-	-	-	0.2	0.3	-	0.2	2.3	3.0
2692/1/1	-	-	-	-	-	-	2.6	-	-	-	2.6
2692/2/1	-	-	-	-	-	-	2.6	-	-	-	2.6
2692/3/1	-	-	-	-	-	-	2.6	-	-	-	2.6
2616/1/1	-	-	-	-	-	-	1.0	-	-	1.5	2.5
2616/2/1	-	-	-	-	-	-	1.0	-	-	1.5	2.5
2750/3/1	-	-	0.05	0.1	0.4	0.2	0.3	-	-	1.2	2.3
2750/4/1	-	-	0.05	0.1	0.4	0.2	0.3	-	-	1.2	2.3
2780/6/1	-	-	-	-	-	-	1.3	-	0.1	-	1.4
2624/1/1	-	-	-	-	-	-	1.3	-	-	-	1.3
2624/2/1	-	-	-	-	-	-	1.3	-	-	-	1.3
2624/3/1	-	-	-	-	-	-	1.3	-	-	-	1.3
2624/4/1	-	-	-	-	-	-	1.3	-	-	-	1.3
2780/4/1	-	-	-	-	-	-	0.7	-	0.05	-	0.7

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for adults based on the 14 high-rate consumers is 37.4 kg y⁻¹

The observed 97.5th percentile rate based on 67 observations is 55.0 kg y⁻¹

Table 19. Adults' consumption rates of root vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Beetroot	Carrot	Garlic	Leek	Onion	Parsnip	Spring onion	Total
2787/1/1	13.5	9.2	-	-	-	-	6.0	28.7
2787/2/1	13.5	9.2	-	-	-	-	6.0	28.7
2786/1/1	-	-	-	-	21.6	-	-	21.6
2786/2/1	-	-	-	-	21.6	-	-	21.6
2704/1/1	5.3	3.6	-	-	3.0	6.3	-	18.2
2704/2/1	5.3	3.6	-	-	3.0	6.3	-	18.2
2689/1/1	-	2.3	-	-	-	4.5	-	6.8
2689/2/1	-	2.3	-	-	-	4.5	-	6.8
2753/1/1	-	-	-	6.6	-	-	-	6.6
2753/2/1	-	-	-	6.6	-	-	-	6.6
2757/1/1	-	5.7	-	-	-	0.4	-	6.0
2757/2/1	-	5.7	-	-	-	0.4	-	6.0
2717/1/1	1.4	4.5	-	-	-	-	-	5.9
2717/2/1	1.4	4.5	-	-	-	-	-	5.9
2616/1/1	5.0	-	-	-	-	-	-	5.0
2616/2/1	5.0	-	-	-	-	-	-	5.0
2620/1/1	-	-	0.7	-	3.7	-	-	4.4
2620/2/1	-	-	0.7	-	3.7	-	-	4.4
2789/1/1	-	3.7	-	-	-	-	-	3.7
2789/2/1	-	3.7	-	-	-	-	-	3.7
2672/1/1	-	3.6	-	-	-	-	-	3.6
2672/2/1	-	3.6	-	-	-	-	-	3.6
2626/1/1	-	1.8	-	-	-	-	-	1.8
2626/2/1	-	1.8	-	-	-	-	-	1.8
2653/1/1	-	-	-	-	1.3	-	-	1.3
2653/2/1	-	-	-	-	1.3	-	-	1.3
2671/1/1	-	-	-	-	1.3	-	-	1.3
2671/2/1	-	-	-	-	1.3	-	-	1.3
2614/1/1	-	0.6	-	-	0.6	-	-	1.1
2614/2/1	-	0.6	-	-	0.6	-	-	1.1
2672/4/1	-	0.9	-	-	-	-	-	0.9
2672/7/1	-	0.9	-	-	-	-	-	0.9
2672/8/1	-	0.9	-	-	-	-	-	0.9
2672/9/1	-	0.9	-	-	-	-	-	0.9
2672/10/1	-	0.9	-	-	-	-	-	0.9
2751/1/1	-	0.7	-	-	-	-	-	0.7
2751/2/1	-	0.7	-	-	-	-	-	0.7
2751/3/1	-	0.7	-	-	-	-	-	0.7
2751/4/1	-	0.7	-	-	-	-	-	0.7
2750/1/1	-	-	0.6	-	-	-	-	0.6
2750/2/1	-	-	0.6	-	-	-	-	0.6
2673/1/1	-	-	-	-	0.5	-	-	0.5
2673/2/1	-	-	-	-	0.5	-	-	0.5
2624/1/1	0.4	-	-	-	-	-	-	0.4
2624/2/1	0.4	-	-	-	-	-	-	0.4
2624/3/1	0.4	-	-	-	-	-	-	0.4
2624/4/1	0.4	-	-	-	-	-	-	0.4
2780/1/1	-	0.2	-	-	-	-	-	0.2
2780/2/1	-	0.2	-	-	-	-	-	0.2
2780/3/1	-	0.2	-	-	-	-	-	0.2
2780/5/1	-	0.2	-	-	-	-	-	0.2
2750/3/1	-	-	0.1	-	-	-	-	0.1
2750/4/1	-	-	0.1	-	-	-	-	0.1
2780/6/1	-	0.1	-	-	-	-	-	0.1
2780/4/1	-	0.03	-	-	-	-	-	0.03

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for adults based on the 6 high-rate consumers is 22.8 kg y⁻¹

The observed 97.5th percentile rate based on 55 observations is 26.2 kg y⁻¹

Table 20. Adults' consumption rates of potato (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Potato
2786/1/1	54.6
2786/2/1	54.6
2620/1/1	47.3
2620/2/1	47.3
2753/1/1	40.3
2753/2/1	40.3
2673/1/1	25.0
2673/2/1	25.0
2704/1/1	21.8
2704/2/1	21.8
2626/1/1	20.5
2626/2/1	20.5
2760/1/1	18.8
2760/2/1	18.8
2760/3/1	18.8
2760/4/1	18.8
2689/1/1	6.8
2689/2/1	6.8
2672/1/1	6.3
2672/2/1	6.3
2717/1/1	5.4
2717/2/1	5.4
2757/1/1	4.2
2757/2/1	4.2
2624/1/1	2.5
2624/2/1	2.5
2624/3/1	2.5
2624/4/1	2.5
2672/4/1	1.6
2672/7/1	1.6
2672/8/1	1.6
2672/9/1	1.6
2672/10/1	1.6
2577/1/1	1.5
2577/2/1	1.5

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of potato for adults based on the 16 high-rate consumers is 30.9 kg y^{-1}

The observed 97.5th percentile rate based on 35 observations is 54.6 kg y^{-1}

Table 21. Adults' consumption rates of domestic fruit (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Gooseberry	Grapes	Lemon	Loganberry	Orange	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Walnut	Whitecurrant	Total
2750/1/1	3.6	-	0.2	-	-	1.2	-	-	1.2	-	-	-	3.2	-	10.0	2.4	-	-	21.8
2750/2/1	3.6	-	0.2	-	-	1.2	-	-	1.2	-	-	-	3.2	-	10.0	2.4	-	-	21.8
2717/1/1	4.5	0.6	-	0.5	2.3	-	-	-	2.3	-	2.3	2.3	1.8	-	-	-	-	-	16.4
2717/2/1	4.5	0.6	-	0.5	2.3	-	-	-	2.3	-	2.3	2.3	1.8	-	-	-	-	-	16.4
2689/1/1	6.8	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-	-	-	-	13.6
2689/2/1	6.8	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-	-	-	-	13.6
2753/1/1	-	-	2.0	-	-	2.7	-	-	-	-	-	-	1.4	2.7	-	0.9	-	2.0	11.8
2753/2/1	-	-	2.0	-	-	2.7	-	-	-	-	-	-	1.4	2.7	-	0.9	-	2.0	11.8
2704/1/1	6.8	-	0.9	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	11.2
2704/2/1	6.8	-	0.9	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	11.2
2671/1/1	6.8	-	0.5	-	-	-	-	0.4	-	0.6	-	-	-	-	-	-	-	-	8.3
2671/2/1	6.8	-	0.5	-	-	-	-	0.4	-	0.6	-	-	-	-	-	-	-	-	8.3
2757/1/1	2.5	-	-	-	-	-	-	-	-	-	-	-	0.5	-	5.0	-	-	-	8.0
2757/2/1	2.5	-	-	-	-	-	-	-	-	-	-	-	0.5	-	5.0	-	-	-	8.0
2672/1/1	-	-	-	-	-	-	3.0	-	-	-	-	-	-	-	-	3.4	-	-	6.4
2672/2/1	-	-	-	-	-	-	3.0	-	-	-	-	-	-	-	-	3.4	-	-	6.4
2697/1/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	5.5
2697/2/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	5.5
2697/3/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	5.5
2697/4/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	5.5
2765/1/1	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5
2765/2/1	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5
2788/1/1	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1
2788/2/1	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1
2788/5/1	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1
2788/6/1	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1
2578/1/1	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0
2578/2/1	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0
2616/1/1	-	-	-	-	-	1.4	-	-	-	-	-	-	2.3	-	-	-	-	-	3.6
2616/2/1	-	-	-	-	-	1.4	-	-	-	-	-	-	2.3	-	-	-	-	-	3.6
2653/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	3.4
2653/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	3.4
2787/1/1	-	-	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8
2787/2/1	-	-	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8
2750/3/1	0.5	-	0.02	-	-	0.2	-	-	0.2	-	-	-	0.4	-	1.3	0.3	-	-	2.7
2750/4/1	0.5	-	0.02	-	-	0.2	-	-	0.2	-	-	-	0.4	-	1.3	0.3	-	-	2.7
2672/4/1	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.9	-	-	1.7
2672/7/1	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.9	-	-	1.7
2672/8/1	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.9	-	-	1.7
2672/9/1	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.9	-	-	1.7
2672/10/1	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.9	-	-	1.7

Table 21. Adults' consumption rates of domestic fruit (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Gooseberry	Grapes	Lemon	Loganberry	Orange	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Walnut	Whitecurrant	Total
2620/1/1	0.4	-	-	-	-	-	-	-	-	-	0.4	-	0.4	-	-	-	0.2	-	1.3
2620/2/1	0.4	-	-	-	-	-	-	-	-	-	0.4	-	0.4	-	-	-	0.2	-	1.3
2751/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	1.1
2751/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	1.1
2751/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	1.1
2751/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	1.1
2614/1/1	0.6	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	1.1
2614/2/1	0.6	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	1.1
2692/1/1	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.8
2692/2/1	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.8
2692/3/1	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.8
2674/1/1	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7
2674/2/1	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7
2674/3/1	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7
2760/1/1	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	0.6
2760/2/1	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	0.6
2780/1/1	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	0.1	-	0.6
2780/2/1	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	0.1	-	0.6
2780/3/1	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	0.1	-	0.6
2780/5/1	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	0.1	-	0.6
2780/6/1	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.03	-	0.2
2780/4/1	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.02	-	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for adults based on the 14 high-rate consumers is 13.0 kg y⁻¹

The observed 97.5th percentile rate based on 63 observations is 18.8 kg y⁻¹

Table 22. Adults' consumption rates of milk ($l\ y^{-1}$) from the Winfrith terrestrial survey area

Person ID number	Cows' milk
2780/1/1	82.0
2780/2/1	82.0
2780/3/1	82.0
2780/5/1	82.0
2780/6/1	24.6
2780/4/1	12.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of milk for adults based on the 4 high-rate consumers is $82.0\ l\ y^{-1}$

The observed 97.5th percentile rate based on 6 observations is $82.0\ l\ y^{-1}$

Table 23. Adults' consumption rates of cattle meat ($kg\ y^{-1}$) from the Winfrith terrestrial survey area

Person ID number	Beef
2619/1/1	47.3
2619/2/1	47.3
2788/1/1	39.2
2788/2/1	39.2
2788/5/1	39.2
2788/6/1	39.2
2660/1/1	8.2
2660/2/1	8.2
2688/1/1	6.2
2688/2/1	6.2
2716/1/1	1.0
2716/2/1	1.0
2716/3/1	1.0
2716/3/2	1.0
2716/3/3	1.0
2716/3/4	1.0
2716/3/5	1.0
2716/3/6	1.0
2697/1/1	0.5
2697/2/1	0.5
2697/3/1	0.5
2697/4/1	0.5

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of cattle meat for adults based on the 6 high-rate consumers is $41.9\ kg\ y^{-1}$

The observed 97.5th percentile rate based on 22 observations is $47.3\ kg\ y^{-1}$

Table 24. Adults' consumption rates of pig meat (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Pork
2672/1/1	10.4
2672/2/1	10.4
2672/4/1	10.4
2672/7/1	10.4
2672/8/1	10.4
2672/9/1	10.4
2672/10/1	10.4
2763/1/1	3.9
2763/2/1	3.9
2763/3/1	3.9
2763/4/1	3.9
2697/1/1	0.5
2697/2/1	0.5
2697/3/1	0.5
2697/4/1	0.5

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of pig meat for adults based on the 11 high-rate consumers is 8.0 kg y^{-1}

The observed 97.5th percentile rate based on 15 observations is 10.4 kg y^{-1}

Table 25. Adults' consumption rates of sheep meat (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Lamb
2660/1/1	47.5
2660/2/1	47.5
2578/1/1	33.9
2578/2/1	33.9
2704/1/1	11.3
2704/2/1	11.3
2747/1/1	3.8
2747/2/1	3.8
2747/3/1	3.8
2747/4/1	3.8
2747/5/1	3.8
2747/6/1	3.8
2672/1/1	1.2
2672/2/1	1.2
2672/4/1	1.2
2672/7/1	1.2
2672/8/1	1.2
2672/9/1	1.2
2672/10/1	1.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of sheep meat for adults based on the 4 high-rate consumers is 40.7 kg y^{-1}

The observed 97.5th percentile rate based on 19 observations is 47.5 kg y^{-1}

Table 26. Adults' consumption rates of poultry (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Chicken	Goose	Partridge	Pheasant	Pigeon	Turkey	Total
2717/1/1	-	1.1	-	-	-	11.8	12.9
2717/2/1	-	1.1	-	-	-	11.8	12.9
2788/1/1	-	-	-	2.8	-	-	2.8
2788/2/1	-	-	-	2.8	-	-	2.8
2788/5/1	-	-	-	2.8	-	-	2.8
2788/6/1	-	-	-	2.8	-	-	2.8
2744/1/1	-	-	-	2.7	-	-	2.7
2744/2/1	-	-	-	2.7	-	-	2.7
2744/3/1	-	-	-	2.7	-	-	2.7
2697/1/1	0.5	-	-	2.0	-	-	2.6
2697/2/1	0.5	-	-	2.0	-	-	2.6
2697/3/1	0.5	-	-	2.0	-	-	2.6
2697/4/1	0.5	-	-	2.0	-	-	2.6
2753/1/1	-	-	0.3	1.3	-	-	1.6
2753/2/1	-	-	0.3	1.3	-	-	1.6
2743/1/1	-	-	-	0.9	0.7	-	1.6
2743/2/1	-	-	-	0.9	0.7	-	1.6

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of poultry for adults based on the 2 high-rate consumers is 12.9 kg y^{-1}

The observed 97.5th percentile rate based on 17 observations is 12.9 kg y^{-1}

Table 27. Adults' consumption rates of eggs (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Chicken egg	Duck egg	Total
2763/1/1	52.0	-	52.0
2763/2/1	52.0	-	52.0
2653/1/1	20.8	-	20.8
2653/2/1	20.8	-	20.8
2753/1/1	20.8	-	20.8
2753/2/1	20.8	-	20.8
2657/1/1	17.8	-	17.8
2657/2/1	17.8	-	17.8
2672/1/1	17.8	-	17.8
2672/2/1	17.8	-	17.8
2760/1/1	15.6	-	15.6
2760/2/1	15.6	-	15.6
2760/3/1	15.6	-	15.6
2760/4/1	15.6	-	15.6
2692/1/1	11.9	-	11.9
2692/2/1	11.9	-	11.9
2692/3/1	11.9	-	11.9
2672/4/1	10.2	-	10.2
2751/1/1	3.0	6.2	9.1
2751/2/1	3.0	6.2	9.1
2763/3/1	9.1	-	9.1
2763/4/1	9.1	-	9.1
2619/1/1	8.2	-	8.2
2619/2/1	8.2	-	8.2
2790/1/1	6.8	-	6.8
2790/2/1	6.8	-	6.8
2697/1/1	6.5	-	6.5
2697/2/1	6.5	-	6.5
2697/3/1	6.5	-	6.5
2697/4/1	6.5	-	6.5
2671/1/1	5.1	-	5.1
2671/2/1	5.1	-	5.1
2673/1/1	4.5	-	4.5
2673/2/1	4.5	-	4.5
2674/1/1	4.1	-	4.1
2674/2/1	4.1	-	4.1
2674/3/1	4.1	-	4.1
2751/3/1	3.0	-	3.0
2751/4/1	3.0	-	3.0
2615/1/1	2.7	-	2.7
2615/2/1	2.7	-	2.7
2615/3/1	2.7	-	2.7
2672/7/1	2.2	-	2.2
2672/8/1	2.2	-	2.2
2616/1/1	2.1	-	2.1
2616/2/1	2.1	-	2.1
2614/1/1	0.7	-	0.7
2614/2/1	0.7	-	0.7
2704/1/1	0.02	-	0.02
2704/2/1	0.02	-	0.02

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of eggs for adults based on the 10 high-rate consumers is 25.9 kg y⁻¹

The observed 97.5th percentile rate based on 50 observations is 45.0 kg y⁻¹

Table 28. Adults' consumption rates of wild/free foods (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Blackberry	Chestnut	Damson	Elderberry	Elderflower	Hawthorn fruit	Hazel nut	Rosehip	Sloe	Total
2671/1/1	0.4	-	-	-	-	-	-	-	3.8	4.2
2671/2/1	0.4	-	-	-	-	-	-	-	3.8	4.2
2750/1/1	4.0	-	-	-	-	-	-	-	-	4.0
2750/2/1	4.0	-	-	-	-	-	-	-	-	4.0
2788/1/1	3.1	-	-	-	-	-	-	-	0.7	3.8
2788/2/1	3.1	-	-	-	-	-	-	-	0.7	3.8
2788/5/1	3.1	-	-	-	-	-	-	-	0.7	3.8
2788/6/1	3.1	-	-	-	-	-	-	-	0.7	3.8
2616/1/1	3.6	-	-	-	-	-	-	-	-	3.6
2616/2/1	3.6	-	-	-	-	-	-	-	-	3.6
2620/1/1	2.7	-	-	-	0.04	-	0.2	-	0.4	3.3
2620/2/1	2.7	-	-	-	0.04	-	0.2	-	0.4	3.3
2757/1/1	2.8	-	-	-	-	-	-	-	-	2.8
2757/2/1	2.8	-	-	-	-	-	-	-	-	2.8
2698/1/1	1.1	-	-	-	-	-	-	-	1.4	2.5
2698/2/1	1.1	-	-	-	-	-	-	-	1.4	2.5
2625/1/1	2.3	-	-	-	-	-	-	-	-	2.3
2760/1/1	1.1	-	-	0.6	-	-	-	-	-	1.7
2760/2/1	1.1	-	-	0.6	-	-	-	-	-	1.7
2623/1/1	1.4	-	-	-	-	-	-	-	-	1.4
2753/1/1	0.3	-	-	-	-	0.3	-	0.3	0.3	1.4
2753/2/1	0.3	-	-	-	-	0.3	-	0.3	0.3	1.4
2674/1/1	0.7	-	-	-	-	-	-	-	0.7	1.3
2674/2/1	0.7	-	-	-	-	-	-	-	0.7	1.3
2674/3/1	0.7	-	-	-	-	-	-	-	0.7	1.3
2751/1/1	0.4	-	0.9	-	-	-	-	-	-	1.3
2751/2/1	0.4	-	0.9	-	-	-	-	-	-	1.3
2751/3/1	0.4	-	0.9	-	-	-	-	-	-	1.3
2751/4/1	0.4	-	0.9	-	-	-	-	-	-	1.3
2754/1/1	-	-	0.8	-	-	-	-	-	0.5	1.2
2754/2/1	-	-	0.8	-	-	-	-	-	0.5	1.2
2787/1/1	0.7	-	-	-	-	-	-	-	0.5	1.1
2787/2/1	0.7	-	-	-	-	-	-	-	0.5	1.1
2689/1/1	1.1	-	-	-	-	-	-	-	-	1.1
2689/2/1	1.1	-	-	-	-	-	-	-	-	1.1
2780/1/1	0.4	0.1	-	-	-	-	0.1	-	0.4	1.1

Table 28. Adults' consumption rates of wild/free foods (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Blackberry	Chestnut	Damson	Elderberry	Elderflower	Hawthorn fruit	Hazel nut	Rosehip	Sloe	Total
2780/2/1	0.4	0.1	-	-	-	-	0.1	-	0.4	1.1
2780/3/1	0.4	0.1	-	-	-	-	0.1	-	0.4	1.1
2780/5/1	0.4	0.1	-	-	-	-	0.1	-	0.4	1.1
2790/1/1	1.0	-	-	-	-	-	-	-	-	1.0
2790/2/1	1.0	-	-	-	-	-	-	-	-	1.0
2574/1/1	0.3	0.3	-	-	-	-	-	-	-	0.7
2574/2/1	0.3	0.3	-	-	-	-	-	-	-	0.7
2615/1/1	0.3	-	-	-	-	-	-	-	0.3	0.6
2615/2/1	0.3	-	-	-	-	-	-	-	0.3	0.6
2615/3/1	0.3	-	-	-	-	-	-	-	0.3	0.6
2750/3/1	0.5	-	-	-	-	-	-	-	-	0.5
2750/4/1	0.5	-	-	-	-	-	-	-	-	0.5
2657/1/1	0.5	-	-	-	-	-	-	-	-	0.5
2657/2/1	0.5	-	-	-	-	-	-	-	-	0.5
2704/1/1	-	-	-	-	-	-	-	-	0.4	0.4
2704/2/1	-	-	-	-	-	-	-	-	0.4	0.4
2780/6/1	0.1	0.03	-	-	-	-	0.03	-	0.1	0.3
2578/1/1	0.2	-	-	-	-	-	-	-	-	0.2
2578/2/1	0.2	-	-	-	-	-	-	-	-	0.2
2780/4/1	0.1	0.02	-	-	-	-	0.02	-	0.1	0.2
2697/1/1	0.1	-	-	-	-	-	-	-	-	0.1
2697/2/1	0.1	-	-	-	-	-	-	-	-	0.1
2697/3/1	0.1	-	-	-	-	-	-	-	-	0.1
2697/4/1	0.1	-	-	-	-	-	-	-	-	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild/free foods for adults based on the 19 high-rate consumers is 3.2 kg y^{-1}

The observed 97.5th percentile rate based on 60 observations is 4.1 kg y^{-1}

Table 29. Adults' consumption rates of rabbits/hares (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Rabbit
2744/1/1	2.2
2744/2/1	2.2
2704/1/1	0.2
2704/2/1	0.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of rabbits/hares for adults based on the 2 high-rate consumers is 2.2 kg y⁻¹

The observed 97.5th percentile rate based on 4 observations is 2.2 kg y⁻¹

Table 30. Adults' consumption rates of honey (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Honey
2697/1/1	4.3
2697/2/1	4.3
2697/3/1	4.3
2697/4/1	4.3
2780/1/1	3.6
2760/1/1	2.7
2760/2/1	2.7
2760/3/1	2.7
2760/4/1	2.7
2760/5/1	2.7
2671/2/1	1.8
2754/1/1	1.8
2754/2/1	1.8
2615/1/1	1.8
2615/2/1	1.8
2615/3/1	1.8
2673/1/1	1.1
2673/2/1	1.1
2619/1/1	0.5
2619/2/1	0.5
2747/1/1	0.5
2747/2/1	0.5
2747/3/1	0.5
2747/4/1	0.5
2747/5/1	0.5
2747/6/1	0.5
2692/1/1	0.5
2692/2/1	0.5
2692/3/1	0.5
2777/1/1	0.4
2777/3/1	0.4
2777/4/1	0.4
2777/5/1	0.4
2777/6/1	0.4
2751/1/1	0.3
2751/2/1	0.3
2751/3/1	0.3
2751/4/1	0.3
2780/2/1	0.3
2780/3/1	0.3
2780/5/1	0.3
2780/6/1	0.1
2780/4/1	0.04

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of honey for adults based on the 16 high-rate consumers is 2.8 kg y⁻¹

The observed 97.5th percentile rate based on 43 observations is 4.3 kg y⁻¹

Table 31. Adults' consumption rates of wild fungi (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Mushrooms
2657/1/1	0.7
2657/2/1	0.7
2751/1/1	0.6
2751/2/1	0.6
2751/3/1	0.6
2751/4/1	0.6
2780/1/1	0.4
2780/2/1	0.4
2780/3/1	0.4
2780/5/1	0.4
2574/1/1	0.3
2574/2/1	0.3
2743/1/1	0.3
2743/2/1	0.3
2780/6/1	0.1
2760/1/1	0.1
2760/2/1	0.1
2780/4/1	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild fungi for adults based on the 14 high-rate consumers is 0.5 kg y⁻¹

The observed 97.5th percentile rate based on 18 observations is 0.7 kg y⁻¹

Table 32. Adults' consumption rates of venison (kg y⁻¹) from the Winfrith terrestrial survey area

Person ID number	Venison
2697/1/1	5.4
2697/2/1	5.4
2697/3/1	5.4
2697/4/1	5.4
2788/1/1	3.8
2788/2/1	3.8
2788/5/1	3.8
2788/6/1	3.8
2744/1/1	1.2
2744/2/1	1.2
2744/3/1	1.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of venison for adults based on the 8 high-rate consumers is 4.6 kg y⁻¹

The observed 97.5th percentile rate based on 11 observations is 5.4 kg y⁻¹

Table 33. Adults' consumption rates of freshwater plants (kg y^{-1}) from the Winfrith terrestrial survey area

Person ID number	Watercress
2574/1/1	10.4
2574/2/1	10.4
2788/1/1	1.1
2788/2/1	1.1
2788/5/1	1.1
2788/6/1	1.1
2574/5/1	1.0
2574/5/2	1.0
2574/5/3	1.0
2574/5/4	1.0
2574/5/5	1.0
2574/5/6	1.0
2574/5/7	1.0
2574/5/8	1.0
2574/5/9	1.0
2574/5/10	1.0

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of freshwater plants for adults based on the 2 high-rate consumers is 10.4 kg y^{-1}

The observed 97.5th percentile rate based on 16 observations is 10.4 kg y^{-1}

Table 34. Children's and infants' consumption rates of green vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Cabbage	Courgette	Cucumber	Total
2672/5/1	15	1.6	2.4	-	4.0
2672/6/1	10	1.6	2.4	-	4.0
2672/3/1	7	1.2	1.8	-	3.0

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for the child age group based on the 3 high-rate consumers is 3.7 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 4.0 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Cabbage	Courgette	Cucumber	Total
2750/5/1	5	-	2.1	1.7	3.8
2750/6/1	2	-	2.1	1.7	3.8

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for the infant age group based on the 2 high-rate consumers is 3.8 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 3.8 kg y⁻¹

Table 35. Children's and infants' consumption rates of other vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Chilli pepper	French bean	Pea	Pepper	Runner bean	Sweetcorn	Tomato	Total
2672/5/1	15	-	-	-	0.2	0.3	0.2	2.3	3.0
2672/6/1	10	-	-	-	0.2	0.3	0.2	2.3	3.0
2672/3/1	7	-	-	-	0.1	0.2	0.1	1.7	2.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for the child age group based on the 3 high-rate consumers is 2.8 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 3.0 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Chilli pepper	French bean	Pea	Pepper	Runner bean	Sweetcorn	Tomato	Total
2750/5/1	5	0.05	0.1	0.4	0.2	0.3	-	1.2	2.3
2750/6/1	2	0.05	0.1	0.4	0.2	0.3	-	1.2	2.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for the infant age group based on the 2 high-rate consumers is 2.3 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 2.3 kg y⁻¹

Table 36. Children's and infants' consumption rates of root vegetables (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Carrot	Garlic	Total
2672/5/1	15	0.9	-	0.9
2672/6/1	10	0.9	-	0.9
2672/3/1	7	0.7	-	0.7

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for the child age group based on the 3 high-rate consumers is 0.9 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 0.9 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Carrot	Garlic	Total
2750/5/1	5	-	0.1	0.1
2750/6/1	2	-	0.1	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for the infant age group based on the 2 high-rate consumers is 0.1 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 0.1 kg y⁻¹

Table 37. Children's and infants' consumption rates of potato (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Potato
2672/5/1	15	1.6
2672/6/1	10	1.6
2672/3/1	7	1.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of potato for the child age group based on the 3 high-rate consumers is 1.5 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 1.6 kg y⁻¹

Infant age group (0 - 5 years old)

No consumption rate data obtained for this group.

Table 38. Children's and infants' consumption rates of domestic fruit (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Apple	Blackcurrant	Gooseberry	Grapes	Loganberry	Raspberry	Rhubarb	Strawberry	Total
2697/5/1	8	2.7	-	-	-	-	-	-	1.4	4.1
2672/5/1	15	-	-	-	0.8	-	-	-	0.9	1.7
2672/6/1	10	-	-	-	0.8	-	-	-	0.9	1.7
2672/3/1	7	-	-	-	0.6	-	-	-	0.7	1.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for the child age group based on the 3 high-rate consumers is 2.5 kg y⁻¹

The observed 97.5th percentile rate based on 4 observations is 3.9 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Apple	Blackcurrant	Gooseberry	Grapes	Loganberry	Raspberry	Rhubarb	Strawberry	Total
2697/6/1	4	2.7	-	-	-	-	-	-	1.4	4.1
2750/5/1	5	0.5	0.02	0.2	-	0.2	0.4	1.3	0.3	2.7
2750/6/1	2	0.5	0.02	0.2	-	0.2	0.4	1.3	0.3	2.7
2788/3/1	4	2.1	-	-	-	-	-	-	-	2.1
2788/4/1	2	1.4	-	-	-	-	-	-	-	1.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for the infant age group based on the 4 high-rate consumers is 2.9 kg y⁻¹

The observed 97.5th percentile rate based on 5 observations is 4.0 kg y⁻¹

Table 39. Children's and infants' consumption rates of cattle meat from the Winfrith terrestrial survey area (kg y⁻¹)**Child age group (6 - 15 years old)**

Person ID number	Age	Beef
2688/4/1	7	4.6
2697/5/1	8	0.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of cattle meat for the child age group based on the high-rate consumer is 4.6 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 4.5 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Beef
2788/3/1	4	6.0
2688/3/1	4	3.1
2788/4/1	2	3.0
2697/6/1	4	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of cattle meat for the infant age group based on the 3 high-rate consumers is 4.0 kg y⁻¹

The observed 97.5th percentile rate based on 4 observations is 5.8 kg y⁻¹

Table 40. Children's and infants' consumption rates of pig meat (kg y⁻¹) from the Winfrith terrestrial survey area**Child age group (6 - 15 years old)**

Person ID number	Age	Pork
2672/5/1	15	10.4
2672/6/1	10	10.4
2672/3/1	7	7.8
2763/6/1	7	2.9
2697/5/1	8	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of pig meat for the child age group based on the 3 high-rate consumers is 9.5 kg y⁻¹

The observed 97.5th percentile rate based on 5 observations is 10.4 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Pork
2763/5/1	3	2.0
2697/6/1	4	0.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of pig meat for the infant age group based on the high-rate consumer is 2.0 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 1.9 kg y⁻¹

Table 41. Children's and infants' consumption rates of sheep meat (kg y^{-1}) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Lamb
2672/5/1	15	1.2
2672/6/1	10	1.2
2672/3/1	7	0.9

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of sheep meat for the child age group based on the 3 high-rate consumers is 1.1 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 1.2 kg y^{-1}

Infant age group (0 - 5 years old)

No consumption rate data obtained for this group.

Table 42. Children's and infants' consumption rates of poultry (kg y^{-1}) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Chicken
2697/5/1	8	0.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of poultry for the child age group based on the high-rate consumer is 0.4 kg y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Infant age group (0 - 5 years old)

Person ID number	Age	Chicken
2697/6/1	4	0.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of poultry for the infant age group based on the high-rate consumer is 0.4 kg y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Table 43. Children's and infants' consumption rates of eggs (kg y^{-1}) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Chicken egg
2672/3/1	7	7.6
2763/6/1	7	6.9
2697/5/1	8	4.9
2672/5/1	15	2.2
2672/6/1	10	2.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of eggs for the child age group based on the 3 high-rate consumers is 6.5 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 7.6 kg y^{-1}

Infant age group (0 - 5 years old)

Person ID number	Age	Chicken egg
2697/6/1	4	4.9
2763/5/1	3	4.6

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of eggs for the infant age group based on the 2 high-rate consumers is 4.7 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 4.9 kg y^{-1}

Table 44. Children's and infants' consumption rates of wild/free foods (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Blackberry	Chestnut	Total
2697/5/1	8	0.1	-	0.1

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of wild/free foods for the child age group based on the high-rate consumer is 0.1 kg y⁻¹

The observed 97.5th percentile is not applicable for 1 observation

Infant age group (0 - 5 years old)

Person ID number	Age	Blackberry	Chestnut	Total
2788/3/1	4	1.6	-	1.6
2788/4/1	2	1.0	-	1.0
2750/5/1	5	0.5	-	0.5
2750/6/1	2	0.5	-	0.5
2574/3/1	5	0.2	0.2	0.3
2574/4/1	4	0.2	0.2	0.3
2697/6/1	4	0.1	-	0.1

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild/free foods for the infant age group based on the 2 high-rate consumers is 1.3 kg y⁻¹

The observed 97.5th percentile rate based on 7 observations is 1.5 kg y⁻¹

Table 45. Children's and infants' consumption rates of honey (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

Person ID number	Age	Honey
2697/5/1	8	3.2
2777/2/1	13	0.4

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of honey for the child age group based on the high-rate consumer is 3.2 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 3.2 kg y⁻¹

Infant age group (0 - 5 years old)

Person ID number	Age	Honey
2697/6/1	4	3.2

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of honey for the infant age group based on the high-rate consumer is 3.2 kg y⁻¹

The observed 97.5th percentile is not applicable for 1 observation

Table 46. Children's and infants' consumption rates of wild fungi (kg y⁻¹) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

No consumption rate data obtained for this group.

Infant age group (0 - 5 years old)

Person ID number	Age	Mushrooms
2574/3/1	5	0.2
2574/4/1	4	0.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild fungi for the infant age group based on the 2 high-rate consumers is 0.2 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 0.2 kg y⁻¹

Table 47. Children's and infant's consumption rates of venison (kg y^{-1}) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

No consumption rate data obtained for this group.

Infant age group (0 - 5 years old)

Person ID number	Age	Venison
2788/3/1	4	1.9
2788/4/1	2	1.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of venison for the infant age group based on the 2 high-rate consumers is 1.6 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.9 kg y^{-1}

Table 48. Infants' consumption rates of freshwater plants (kg y^{-1}) from the Winfrith terrestrial survey area

Child age group (6 - 15 years old)

No consumption rate data obtained for this group.

Infant age group (0 - 5 years old)

Person ID number	Age	Watercress
2574/3/1	5	5.2
2574/4/1	4	5.2
2788/3/1	4	0.5
2788/4/1	2	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of freshwater plants for the infant age group based on the 2 high-rate consumers is 5.2 kg y^{-1}

The observed 97.5th percentile rate based on 4 observations is 5.2 kg y^{-1}

Table 49. Percentage contribution each food type makes to its terrestrial food group for adults

<p>Green vegetables</p> <p>Courgette 42.5 % Cucumber 25.6 % Cabbage 18.4 % Spinach 4.1 % Lettuce 3.1 % Kale 2.2 % Broccoli 1.7 % Herbs 1.3 % Artichoke 1.2 %</p>	<p>Milk</p> <p>Cows' milk 100.0 %</p>	<p>Venison</p> <p>Venison 100.0 %</p>
<p>Other vegetables</p> <p>Runner bean 40.2 % Tomato 40.1 % Broad bean 9.5 % French bean 2.9 % Pepper 2.8 % Aubergine 1.9 % Sweetcorn 1.0 % Pea 0.8 % Chilli pepper 0.6 % Squash 0.2 %</p>	<p>Cattle meat</p> <p>Beef 100.0 %</p>	<p>Freshwater plants</p> <p>Watercress 100.0 %</p>
	<p>Pig meat</p> <p>Pork 100.0 %</p>	<p>Sheep meat</p> <p>Lamb 100.0 %</p>
<p>Root vegetables</p> <p>Carrot 32.0 % Onion 26.1 % Beetroot 21.2 % Parsnip 9.2 % Leek 5.4 % Spring onion 4.9 % Garlic 1.2 %</p>	<p>Poultry</p> <p>Pheasant 51.5 % Turkey 38.2 % Goose 3.6 % Chicken 3.5 % Pigeon 2.2 % Partridge 1.0 %</p>	
	<p>Potato</p> <p>Potato 100.0 %</p>	<p>Eggs</p> <p>Chicken egg 97.6 % Duck egg 2.4 %</p>
<p>Domestic fruit</p> <p>Apple 38.1 % Rhubarb 16.9 % Strawberry 8.6 % Raspberry 7.6 % Plum 6.0 % Blackcurrant 4.3 % Gooseberry 3.6 % Grapes 3.3 % Pear 2.9 % Loganberry 2.4 % Redcurrant 1.8 % Cherry 1.5 % Whitecurrant 1.4 % Orange 0.4 % Blackberry 0.4 % Blueberry 0.3 % Walnut 0.3 % Lemon 0.2 %</p>	<p>Wild/free foods</p> <p>Blackberry 66.9 % Sloe 23.0 % Damson 5.3 % Chestnut 1.2 % Elderberry 1.2 % Hazel nut 0.9 % Rosehip 0.7 % Hawthorn fruit 0.7 % Elderflower 0.1 %</p>	
	<p>Rabbits/hares</p> <p>Rabbit 100.0 %</p>	
	<p>Honey</p> <p>Honey 100.0 %</p>	
	<p>Wild fungi</p> <p>Mushrooms 100.0 %</p>	

Notes

Percentages are based on the consumption of all adults in the survey consuming that particular food group.

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
0 to 0.25 km zone				
2618/1/1	Residing	7258	1096	8354
2616/2/1	Residing	7731	548	8279
2616/1/1	Residing	7365	914	8279
2789/1/1	Residing	6413	1826	8239
2750/1/1	Residing	7572	351	7923
2750/2/1	Residing	6168	1755	7923
2614/2/1	Residing	7012	886	7898
2614/1/1	Residing	6915	261	7176
2789/2/1	Residing	5796	640	6436
2615/3/1	Residing	5414	470	5884
2615/1/1	Residing	4040	1142	5182
2615/2/1	Residing	4040	1142	5182
2676/3/1	Working	1844	8	1851
2676/2/1	Working	1149	8	1157
2676/1/1	Working	455	8	463
2676/1/2	Working	455	8	463
2676/1/3	Working	455	8	463
2676/1/4	Working	455	8	463
2676/1/5	Working	455	8	463
2781/1/1	Working	32	2	34
2781/1/2	Working	32	2	34
2781/1/3	Working	32	2	34
2781/1/4	Working	32	2	34
2781/1/5	Working	32	2	34
2781/1/6	Working	32	2	34
2781/1/7	Working	32	2	34
2781/1/8	Working	32	2	34
2781/1/9	Working	32	2	34
2781/1/10	Working	32	2	34

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2781/1/11	Working	32	2	34
2781/1/12	Working	32	2	34
2781/2/1	Working	22	3	25
2781/2/2	Working	22	3	25
2781/2/3	Working	22	3	25
2781/2/4	Working	22	3	25
2781/2/5	Working	22	3	25
2781/2/6	Working	22	3	25
2781/2/7	Working	22	3	25
2781/2/8	Working	22	3	25
2781/5/1	Working	16	2	18
2781/6/1	Working	17	1	18
2781/7/1	Working	17	1	18
2781/3/1	Working	16	1	17
2781/3/2	Working	16	1	17
2781/3/3	Working	16	1	17
2781/3/4	Working	16	1	17
2781/3/5	Working	16	1	17
2781/3/6	Working	16	1	17
2781/3/7	Working	16	1	17
2781/3/8	Working	16	1	17
2781/3/9	Working	16	1	17
2781/3/10	Working	16	1	17
2781/3/11	Working	16	1	17
2781/3/12	Working	16	1	17
2781/3/13	Working	16	1	17
2781/3/14	Working	16	1	17
2781/4/1	Working	10	2	12
2781/4/2	Working	10	2	12

Table 50. Direct radiation occupancy rates for adults, children and infants ($h\ y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.25 to 0.5 km zone				
2692/3/1	Residing	8290	366	8656
2657/1/1	Residing	7996	548	8544
2692/2/1	Residing	8029	366	8395
2657/2/1	Residing	7533	731	8264
2790/1/1	Residing	5896	2191	8087
2790/2/1	Residing	5714	2373	8087
2757/2/1	Residing	7421	543	7964
2757/1/1	Residing	6154	1810	7964
2660/2/1	Residing	4622	2010	6632
2692/1/1	Residing	6485	104	6589
2660/1/1	Residing	4560	2010	6570
2663/1/1	Working	1823	228	2051
2663/2/1	Working	1823	228	2051
2663/1/2	Working	1823	228	2051
2663/2/2	Working	1823	228	2051
2663/1/3	Working	1823	228	2051
2663/2/3	Working	1823	228	2051
2663/1/4	Working	1823	228	2051
2663/2/4	Working	1823	228	2051
2663/1/5	Working	1823	228	2051
2663/2/5	Working	1823	228	2051
2663/1/6	Working	1823	228	2051
2663/1/7	Working	1823	228	2051
2663/1/8	Working	1823	228	2051
2663/1/9	Working	1823	228	2051
2663/1/10	Working	1823	228	2051
2663/1/11	Working	1823	228	2051
2663/1/12	Working	1823	228	2051
2663/1/13	Working	1823	228	2051

Table 50. Direct radiation occupancy rates for adults, children and infants ($h\ y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2663/1/14	Working	1823	228	2051
2663/1/15	Working	1823	228	2051
2702/1/1	Working	1741	48	1789
2703/1/1	Working	1741	48	1789
2703/2/1	Working	1741	48	1789
2705/1/1	Working	1741	48	1789
2705/2/1	Working	1741	48	1789
2706/1/1	Working	1741	48	1789
2706/2/1	Working	1741	48	1789
2707/1/1	Working	1741	48	1789
2708/1/1	Working	1741	48	1789
2708/2/1	Working	1741	48	1789
2709/1/1	Working	1741	48	1789
2711/1/1	Working	1741	48	1789
2711/2/1	Working	1741	48	1789
2712/1/1	Working	1741	48	1789
2713/1/1	Working	1741	48	1789
2714/1/1	Working	1741	48	1789
2715/1/1	Working	1741	48	1789
2715/2/1	Working	1741	48	1789
2705/1/2	Working	1741	48	1789
2705/2/2	Working	1741	48	1789
2707/1/2	Working	1741	48	1789
2708/1/2	Working	1741	48	1789
2709/1/2	Working	1741	48	1789
2712/1/2	Working	1741	48	1789
2715/1/2	Working	1741	48	1789
2705/1/3	Working	1741	48	1789
2705/2/3	Working	1741	48	1789
2707/1/3	Working	1741	48	1789

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2708/1/3	Working	1741	48	1789
2709/1/3	Working	1741	48	1789
2712/1/3	Working	1741	48	1789
2715/1/3	Working	1741	48	1789
2705/1/4	Working	1741	48	1789
2709/1/4	Working	1741	48	1789
2705/1/5	Working	1741	48	1789
2709/1/5	Working	1741	48	1789
2705/1/6	Working	1741	48	1789
2709/1/6	Working	1741	48	1789
2705/1/7	Working	1741	48	1789
2705/1/8	Working	1741	48	1789
2705/1/9	Working	1741	48	1789
2705/1/10	Working	1741	48	1789
2705/1/11	Working	1741	48	1789
2705/1/12	Working	1741	48	1789
2705/1/13	Working	1741	48	1789
2705/1/14	Working	1741	48	1789
2705/1/15	Working	1741	48	1789
2705/1/16	Working	1741	48	1789
2705/1/17	Working	1741	48	1789
2762/1/1	Working	1598	191	1789
2762/1/2	Working	1598	191	1789
2752/1/1	Working	626	782	1408
2752/2/1	Working	626	782	1408
2752/3/1	Working	626	782	1408
2752/4/1	Working	626	782	1408
2752/5/1	Working	626	782	1408
2752/6/1	Working	626	782	1408
2752/7/1	Working	626	782	1408

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2752/2/2	Working	626	782	1408
2752/5/2	Working	626	782	1408
2752/6/2	Working	626	782	1408
2752/2/3	Working	626	782	1408
2752/6/3	Working	626	782	1408
2752/2/4	Working	626	782	1408
2752/6/4	Working	626	782	1408
2752/2/5	Working	626	782	1408
2752/2/6	Working	626	782	1408
2752/2/7	Working	626	782	1408
2752/2/8	Working	626	782	1408
2692/4/1	Working	1042	209	1251
2657/3/1	Working	768	96	864
2657/4/1	Working	768	96	864
2617/3/1	Tending to cattle	-	209	209
2617/3/2	Tending to cattle	-	209	209
2617/3/3	Tending to cattle	-	209	209
2617/3/4	Tending to cattle	-	209	209
>0.5 to 1.0 km zone				
2704/1/1	Residing	6837	1827	8664
2704/2/1	Residing	6837	1827	8664
2626/2/1	Residing	6464	2192	8656
2577/1/1	Residing	8368	183	8551
2577/2/1	Residing	6726	1825	8551
2680/5/1	Residing and working	8108	365	8473
2680/6/1	Residing and working	8108	365	8473
2754/2/1	Residing	7672	731	8403
2753/2/1	Residing	7338	1005	8343
2751/1/1	Residing	4478	3833	8311
2753/1/1	Residing	7234	1005	8239

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2626/1/1	Residing	6411	1828	8239
2697/1/1	Residing	5926	2190	8116
2625/1/1	Residing	7334	666	8001
2677/2/1	Residing and working	6536	1376	7912
2672/1/1	Residing	6062	1644	7706
2765/2/1	Residing	7318	337	7655
2754/1/1	Residing	6445	1188	7633
2672/2/1	Residing	6183	1292	7475
2698/1/1	Residing	5532	1826	7358
2653/2/1	Residing	4276	2920	7196
2697/5/1	Residing	5774	1370	7144
2697/6/1	Residing	5774	1370	7144
2671/2/1	Residing	5602	1250	6852
2786/1/1	Residing	5626	1032	6659
2786/2/1	Residing	5626	1032	6659
2674/1/1	Residing	4914	1736	6649
2673/2/1	Residing	5840	730	6570
2673/1/1	Residing	3650	2920	6570
2697/2/1	Residing	5925	624	6549
2620/1/1	Residing	4934	1553	6487
2620/2/1	Residing	4934	1553	6487
2765/1/1	Residing	5744	731	6475
2698/2/1	Residing	5158	1305	6463
2674/2/1	Residing	4638	1736	6373
2697/3/1	Residing	6231	130	6362
2697/4/1	Residing	6231	130	6362
2674/3/1	Residing	3989	2372	6362
2677/3/1	Residing	5523	786	6310
2677/4/1	Residing	5523	786	6310
2680/7/1	Residing	5892	365	6257

Table 50. Direct radiation occupancy rates for adults, children and infants ($h\ y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2680/8/1	Residing	5892	365	6257
2751/2/1	Residing	5709	548	6257
2689/1/1	Residing	4910	1279	6189
2689/2/1	Residing	4910	1279	6189
2653/1/1	Residing	3233	2920	6153
2677/1/1	Residing and working	4796	983	5779
2671/1/1	Residing	3192	988	4180
2613/1/1	Working	2232	168	2400
2613/2/1	Working	2232	168	2400
2613/1/2	Working	2232	168	2400
2613/2/2	Working	2232	168	2400
2613/1/3	Working	2232	168	2400
2613/2/3	Working	2232	168	2400
2613/1/4	Working	2232	168	2400
2613/2/4	Working	2232	168	2400
2680/4/1	Working	1755	251	2006
2680/4/2	Working	1755	251	2006
2680/4/3	Working	1755	251	2006
2680/1/1	Working	1733	144	1877
2701/1/1	Working	1741	48	1789
2701/2/1	Working	1741	48	1789
2701/1/2	Working	1741	48	1789
2701/2/2	Working	1741	48	1789
2701/1/3	Working	1741	48	1789
2701/2/3	Working	1741	48	1789
2701/1/4	Working	1741	48	1789
2701/2/4	Working	1741	48	1789
2701/1/5	Working	1741	48	1789
2701/1/6	Working	1741	48	1789
2701/1/7	Working	1741	48	1789

Table 50. Direct radiation occupancy rates for adults, children and infants ($h y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2701/1/8	Working	1741	48	1789
2701/1/9	Working	1741	48	1789
2701/1/10	Working	1741	48	1789
2701/1/11	Working	1741	48	1789
2701/1/12	Working	1741	48	1789
2701/1/13	Working	1741	48	1789
2701/1/14	Working	1741	48	1789
2701/1/15	Working	1741	48	1789
2701/1/16	Working	1741	48	1789
2681/1/1	Working	1689	52	1741
2681/2/1	Working	1689	52	1741
2681/1/2	Working	1689	52	1741
2681/2/2	Working	1689	52	1741
2681/1/3	Working	1689	52	1741
2681/2/3	Working	1689	52	1741
2681/1/4	Working	1689	52	1741
2681/2/4	Working	1689	52	1741
2681/1/5	Working	1689	52	1741
2681/2/5	Working	1689	52	1741
2681/1/6	Working	1689	52	1741
2681/2/6	Working	1689	52	1741
2681/1/7	Working	1689	52	1741
2681/2/7	Working	1689	52	1741
2681/1/8	Working	1689	52	1741
2681/2/8	Working	1689	52	1741
2681/1/9	Working	1689	52	1741
2681/1/10	Working	1689	52	1741
2681/1/11	Working	1689	52	1741
2681/1/12	Working	1689	52	1741
2677/5/1	Working	230	1458	1687

Table 50. Direct radiation occupancy rates for adults, children and infants ($h\ y^{-1}$) in the Winfrith area

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
2677/6/1	Working	230	1458	1687
2677/5/2	Working	230	1458	1687
2677/6/2	Working	230	1458	1687
2677/5/3	Working	230	1458	1687
2677/5/4	Working	230	1458	1687
2677/5/5	Working	230	1458	1687
2677/5/6	Working	230	1458	1687
2672/8/1	Visiting a resident	1126	125	1251
2613/3/1	Working	1242	6	1248
2613/4/1	Working	1242	6	1248
2613/3/2	Working	1242	6	1248
2613/4/2	Working	1242	6	1248
2613/3/3	Working	1242	6	1248
2613/4/3	Working	1242	6	1248
2680/2/1	Working	903	75	978
2680/3/1	Working	903	75	978
2680/2/2	Working	903	75	978
2680/3/2	Working	903	75	978
2680/3/3	Working	903	75	978
2680/3/4	Working	903	75	978
2680/3/5	Working	903	75	978
2780/2/1	Farming	-	209	209
2780/7/1	Farming	-	209	209
2780/1/1	Farming	-	60	60

Table 51. Analysis of direct radiation occupancy rates ($h\ y^{-1}$) for adults, children and infants in the Winfrith area

0 to 0.25 km zone	
Number of hours	Number of observations
>8000 to 8760	4
>7000 to 8000	4
>6000 to 7000	1
>5000 to 6000	3
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	0
>1000 to 2000	2
0 to 1000	44
0 to 8760	58

>0.25 to 0.5 km zone	
Number of hours	Number of observations
>8000 to 8760	6
>7000 to 8000	2
>6000 to 7000	3
>5000 to 6000	0
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	20
>1000 to 2000	70
0 to 1000	6
0 to 8760	107

>0.5 to 1.0 km zone	
Number of hours	Number of observations
>8000 to 8760	14
>7000 to 8000	9
>6000 to 7000	23
>5000 to 6000	1
>4000 to 5000	1
>3000 to 4000	0
>2000 to 3000	11
>1000 to 2000	56
0 to 1000	10
0 to 8760	125

Table 52. Gamma dose rate measurements ($\mu\text{Gy h}^{-1}$) for the Winfrith direct radiation survey area

Residences and businesses				
Residence or business	Indoor substrate	Indoor gamma dose rate at 1 metre^a	Outdoor substrate	Outdoor gamma dose rate at 1 metre^a
Residence 1	Concrete	0.066	-	-
Residence 2	Stone	0.089	Grass	0.053
Residence 3	Stone	0.064	Grass	0.045
Residence 4	Concrete	0.043	Grass	0.063
Residence 5	Concrete	0.069	Grass	0.061
Residence 6	Concrete	0.084	Tarmac	0.067
Residence 7	Concrete	0.073	Stones	0.061
Residence 8	Concrete	0.062	Grass	0.057
Residence 9	Concrete	0.070	Grass	0.061
Residence 10	Concrete	0.059	Grass	0.068
Residence 11	Stone	0.087	Grass	0.076
Residence 12	Concrete	0.065	Grass	0.062
Residence 13	Concrete	0.064	Grass	0.063
Residence 14	Wood	0.062	Grass	0.064
Residence 15	Stone	0.084	Grass	0.069
Residence 16	Wood	0.082	Grass	0.064
Residence 17	Stone	0.077	Grass	0.054
Residence 18	Wood	0.064	Grass	0.066
Residence 19	Wood	0.075	Grass	0.067
Residence 20	Wood	0.088	Grass	0.062
Residence 21	Concrete	0.080	Grass	0.066
Residence 22	-	-	Stone pavement	0.053
Residence 23	-	-	Concrete	0.077
Residence 24	-	-	Grass	0.067
Residence 25	-	-	Grass	0.064
Residence 26	-	-	Grass	0.057
Residence 27	-	-	Stones	0.057
Residence 28	-	-	Grass	0.062
Residence 29	-	-	Concrete	0.067
Residence 30	-	-	Grass	0.064
Business 1	Concrete	0.073	Grass	0.076
Business 2	Wood	0.071	Grass	0.065
Business 3	Wood	0.042	Grass	0.057

Backgrounds				
	Location	National Grid Reference	Substrate	Gamma dose rate at 1 metre
Background 1	Near West Holme	SY 881 856	Grass	0.062
Background 2	Near West Lulworth	SY 810 812	Grass	0.075
Background 3	Near Briantspuddle	SY 816 946	Grass	0.058
Background 4	Near Broadmayne	SY 725 862	Grass	0.063

Notes

^a These measurements have not been adjusted for background dose rates

Table 53. Combinations of adult pathways for consideration in dose assessments in the Winfrith area

Combination number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand	Intertidal occupancy over	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
1	X	X	X	X																						X		X			
2	X	X	X	X																		X						X	X		
3					X	X	X	X							X		X													X	X
4																							X					X	X		
5	X	X	X																						X			X	X		
6																									X			X	X	X	
7	X																					X		X							
8					X	X	X	X	X					X												X					
9																							X	X					X		
10			X																			X					X				
11	X	X	X		X	X							X					X													
12	X	X									X		X																X	X	X
13					X	X	X	X	X			X	X		X														X	X	
14		X																					X	X			X				
15	X	X	X											X			X			X						X		X			
16		X												X					X												
17	X				X	X	X	X								X													X	X	
18					X	X	X	X					X	X	X														X	X	
19	X				X	X	X	X							X	X		X						X			X		X	X	
20					X	X	X	X	X				X		X	X	X												X	X	
21	X							X	X		X		X		X					X	X										
22								X	X	X	X	X	X	X	X	X													X	X	
23																X		X		X											
24		X	X	X	X	X		X	X						X	X	X	X		X		X				X		X			
25					X	X	X	X							X	X	X	X												X	X
26	X	X	X		X	X	X	X	X							X	X	X												X	X

Notes

The food groups and external pathways marked with a cross are combined for the corresponding combination number. For example, combination number 1 represents an individual (or individuals) from Annex 1 who had positive data for the following pathways: fish, crustaceans, molluscs, marine plants/algae, handling fishing gear, occupancy on water.

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2574/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.3	-	10.4	-	-	-	-	-	-	-	-	-	-	
2574/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.3	-	10.4	-	-	-	-	-	-	-	-	-	-	-
2574/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2574/5/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-
2577/1/1	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8368	183	
2577/2/1	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6726	1825	
2578/1/1	-	-	-	-	-	-	-	-	4.0	-	-	-	33.9	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2578/2/1	-	-	-	-	-	-	-	-	4.0	-	-	-	33.9	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2579/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-
2579/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-
2580/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	175	-	-	-	-
2580/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	175	-	-	-	-
2581/1/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	88	-	-	-	-
2581/2/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2581/3/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2581/4/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2581/5/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2582/1/1	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-
2582/2/1	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2584/1/1	28.2	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	112	-	-
2584/2/1	28.2	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	112	-	-
2584/3/1	28.2	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-
2585/1/1	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2585/1/2	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2585/1/3	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2585/1/4	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2585/2/1	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2585/2/2	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	-	-
2586/13/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	9	30	-	-	-	-
2586/14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	9	30	-	-	-	-
2586/15/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	9	30	-	-	-	-
2586/16/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	9	30	-	-	-	-

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
2586/17/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	9	30	-	-	
2586/18/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	9	30	-	-
2586/19/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/19/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/19/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/19/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/19/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/20/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/20/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/20/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/20/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2586/20/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	48	166	-	-
2587/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	-	-	
2588/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	209	-	-	
2590/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	12	-	-	-	
2592/1/1	-	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	360	-	-	-	
2592/2/1	-	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	144	-	-	-	
2593/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	
2594/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	54	-	-	-	
2594/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	54	-	-	-	
2594/3/1	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	54	-	-	-	
2595/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	-	-	-	
2595/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-	-	
2595/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	-	-	-	
2596/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	810	-	-	
2597/1/1	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	-	
2597/2/1	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	-	
2597/3/1	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	-	
2597/4/1	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	-	
2598/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2304	-	-	
2598/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2304	-	-	
2598/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2304	-	-	
2598/2/1	11.6	8.5	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2304	-	-	
2598/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2598/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2598/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2598/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2600/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836	-	-	-	
2600/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836	-	-	-	
2600/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836	-	-	-	

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary		
2637/4/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216	-	-		
2637/4/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216	-	-	
2637/4/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216	-	-	
2637/4/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216	-	-	
2637/4/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216	-	-	
2638/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	474	-	-	
2638/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	474	-	-	
2638/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	384	-	-	
2639/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	421	-	-
2639/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	421	-	-
2639/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	421	-	-
2639/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	421	-	-
2640/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	313	-	-
2642/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	489	521	-	-
2642/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	489	521	-	-
2642/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	521	-	-
2642/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	521	-	-
2642/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	521	-	-
2642/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	521	-	-
2642/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/7/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2642/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2643/1/1	20.9	6.0	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-	-	
2643/2/1	20.9	6.0	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2643/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2496	-	-
2643/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2496	-	-
2643/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2496	-	-
2643/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2496	-	-
2643/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-	-
2643/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-	-
2643/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-	-
2644/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
2644/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
2651/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	-	-	-	-	-	-	-
2652/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	548	-	-	-	-	-	-	-
2653/1/1	-	-	-	-	11.0	5.4	1.3	-	3.4	-	-	-	-	-	20.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3233	2920
2653/2/1	-	-	-	-	11.0	5.4	1.3	-	3.4	-	-	-	-	-	20.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4276	2920
2654/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	444	-	-	52	-	-	-	-
2654/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	497	-	-	-	-	-	-	-
2656/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	57	-	-	-	-
2656/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	57	-	-	-	-
2656/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	57	-	-	-	-
2656/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	57	-	-	-	-
2656/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	57	-	-	-	-
2657/1/1	-	-	-	-	9.4	15.9	-	-	-	-	-	-	-	-	17.8	0.5	-	-	0.7	-	-	-	-	-	-	-	-	-	-	7996	548
2657/2/1	-	-	-	-	9.4	15.9	-	-	-	-	-	-	-	-	17.8	0.5	-	-	0.7	-	-	-	-	-	-	-	-	-	-	7533	731
2657/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	768	96	
2657/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	768	96	
2659/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	5	-	-	-	-
2659/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	5	-	-	-	-
2659/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-
2659/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-
2659/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	-
2659/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	5	-	-	-	-
2659/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	5	-	-	-	-
2660/1/1	3.2	-	0.1	-	-	-	-	-	-	-	8.2	-	47.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209	4560	2010	
2660/2/1	3.2	-	0.1	-	-	-	-	-	-	-	8.2	-	47.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4622	2010	
2661/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	254	-	-	-
2662/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	-	-	-
2662/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	-	-	-
2663/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	
2663/1/13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228	

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2681/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2681/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2681/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2681/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2681/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2681/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52
2684/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611	-	-
2684/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611	-	-
2684/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611	-	-
2684/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611	-	-
2685/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	-	-	1877	-	-	
2685/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	-	-	1877	-	-	
2687/1/1	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390	-	-	-	-	
2688/1/1	-	-	-	-	-	-	-	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2688/2/1	-	-	-	-	-	-	-	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2689/1/1	15.0	-	-	-	-	11.8	6.8	6.8	13.6	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	4910	1279	
2689/2/1	15.0	-	-	-	-	11.8	6.8	6.8	13.6	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	4910	1279	
2691/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	1	-	-	-	
2691/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	1	-	-	-	
2691/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	1	-	-	-	
2691/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	
2691/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	
2691/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	
2691/4/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	
2692/1/1	-	-	-	-	-	2.6	-	-	0.8	-	-	-	-	-	11.9	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	6485	104	
2692/2/1	-	-	-	-	-	2.6	-	-	0.8	-	-	-	-	-	11.9	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	8029	366	
2692/3/1	-	-	-	-	-	2.6	-	-	0.8	-	-	-	-	-	11.9	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	8290	366	
2692/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1042	209	
2693/11/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/11/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/11/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/11/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/11/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/12/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/12/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/12/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/12/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2693/12/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	
2694/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76	-	-	-	-	

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary			
2716/3/1	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2716/3/2	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2716/3/3	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2716/3/4	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2716/3/5	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2716/3/6	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2717/1/1	-	-	-	-	6.2	17.7	5.9	5.4	16.4	-	-	-	-	12.9	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-		
2717/2/1	-	-	-	-	6.2	17.7	5.9	5.4	16.4	-	-	-	-	12.9	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	
2719/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-	-	-	-	
2719/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-	-	-	-	
2719/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-	-	-	-	
2722/1/1	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	5	-	-	-	-	-	-	
2722/2/1	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	5	-	-	-	-	-	-	
2723/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	
2724/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	-	-	-	-	-	
2724/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	-	-	-	-	-	
2728/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	-	42	-	-	-	-	-	
2728/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	-	42	-	-	-	-	-	
2728/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	-	42	-	-	-	-	-	
2728/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	-	42	-	-	-	-	-	
2728/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2728/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	
2729/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	304	-	-	-	-	-
2729/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	-	-	304	-	-	-	-	-
2730/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-
2730/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	20	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
2730/1/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-	
2730/1/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/1/27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	20	-	-
2730/2/1	10.2	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	56	20	-	-	
2732/1/1	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	-	
2733/1/1	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2733/2/1	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2734/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	
2734/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2734/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2734/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2734/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	
2737/1/1	21.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1440	-	-	
2737/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1440	-	-	
2738/1/1	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	704	-	-	
2741/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	10	-	-	
2741/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	10	-	-	
2741/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	10	-	-	

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary		
2781/1/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	2		
2781/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	3	
2781/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/3/14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1	
2781/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	
2781/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	
2781/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	2	
2781/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	1	
2781/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	1	
2782/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/1/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-

Annex 1. Adults' consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2782/1/13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2782/2/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-
2783/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	287	-	-
2783/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	-	287	-	-
2783/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	-	287	-	-
2783/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2783/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-	-	-	287	-	-
2784/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	392	-	-	-
2785/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	392	-	-	-
2785/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	196	-	-	-	-
2785/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	196	-	-	-	-
2786/1/1	-	-	-	-	18.4	45.4	21.6	54.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5626	1032	
2786/2/1	-	-	-	-	18.4	45.4	21.6	54.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5626	1032	
2787/1/1	-	-	-	-	-	20.4	28.7	-	2.8	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2787/2/1	-	-	-	-	-	20.4	28.7	-	2.8	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2788/1/1	5.0	-	-	-	-	-	-	-	4.1	-	39.2	-	-	2.8	-	3.8	-	-	-	3.8	1.1	-	-	-	-	-	-	-	-	-	-	-
2788/2/1	5.0	-	-	-	-	-	-	-	4.1	-	39.2	-	-	2.8	-	3.8	-	-	-	3.8	1.1	-	-	-	-	-	-	-	-	-	-	-
2788/5/1	5.0	-	-	-	-	-	-	-	4.1	-	39.2	-	-	2.8	-	3.8	-	-	-	3.8	1.1	-	-	-	-	-	-	-	-	-	-	-
2788/6/1	5.0	-	-	-	-	-	-	-	4.1	-	39.2	-	-	2.8	-	3.8	-	-	-	3.8	1.1	-	-	-	-	-	-	-	-	-	-	-
2789/1/1	-	-	-	-	2.9	19.4	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6413	1826	
2789/2/1	-	-	-	-	2.9	19.4	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5796	640	
2790/1/1	-	-	-	-	-	3.3	-	-	-	-	-	-	-	-	6.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	5896	2191	
2790/2/1	-	-	-	-	-	3.3	-	-	-	-	-	-	-	-	6.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	5714	2373	

Annex 1. Adults' consumption rates (kg y^{-1} and l y^{-1}) and occupancy rates (h y^{-1}) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
2791/1/1	2.5	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	-	-	-	-	-	118	-	-	-
2791/2/1	2.5	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	-	-	-	-	-	118	-	-	-

Notes

Emboldened observations are the high-rate individuals

Annex 2. Children's and infants' consumption rates (kg y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
Child age group (6 - 15 years old)																											
2586/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/10/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/11/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/12/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2632/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	116	-	-	-	
2632/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	116	-	-	-	
2644/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	9	-	-	-	
2644/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	-	9	-	-	-	
2672/3/1	-	-	-	-	3.0	2.3	0.7	1.2	1.2	-	7.8	0.9	-	7.6	-	-	-	-	-	-	-	-	-	-	-	-	
2672/5/1	-	-	-	-	4.0	3.0	0.9	1.6	1.7	-	10.4	1.2	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	
2672/6/1	-	-	-	-	4.0	3.0	0.9	1.6	1.7	-	10.4	1.2	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	
2677/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5523	786	
2677/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5523	786	
2688/4/1	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2693/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	

Annex 2. Children's and infants' consumption rates (kg y⁻¹) and occupancy rates (h y⁻¹) in the Winfrith area

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2693/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	
2693/10/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-
2697/5/1	-	-	-	-	-	-	-	-	4.1	0.4	0.4	-	0.4	4.9	0.1	3.2	-	-	-	-	-	-	-	-	5774	1370	
2748/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	13	-	-	
2748/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	13	-	-	
2761/4/1	32.4	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2761/5/1	32.4	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2761/6/1	24.3	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2763/6/1	-	-	-	-	-	-	-	-	-	-	2.9	-	-	6.9	-	-	-	-	-	-	-	-	-	-	-	-	
2777/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	
2783/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213	213	-	-	287	-	-	
Infant age group (0 - 5 years old)																											
2574/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	0.2	-	5.2	-	-	-	-	-	-	-	
2574/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	0.2	-	5.2	-	-	-	-	-	-	-	
2688/3/1	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2697/6/1	-	-	-	-	-	-	-	-	4.1	0.4	0.4	-	0.4	4.9	0.1	3.2	-	-	-	-	-	-	-	-	5774	1370	
2750/5/1	-	-	-	-	3.8	2.3	0.1	-	2.7	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	
2750/6/1	-	-	-	-	3.8	2.3	0.1	-	2.7	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	
2761/7/1	10.7	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2763/5/1	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	4.6	-	-	-	-	-	-	-	-	-	-	-	
2764/7/1	5.4	9.6	9.4	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2788/3/1	2.5	-	-	-	-	-	-	-	2.1	6.0	-	-	-	-	1.6	-	-	1.9	0.5	-	-	-	-	-	-	-	
2788/4/1	1.6	-	-	-	-	-	-	-	1.4	3.0	-	-	-	-	1.0	-	-	1.3	0.4	-	-	-	-	-	-	-	

Notes

Emboldened observations are the high-rate individuals

Annex 3. Qualitative and estimated data for use in dose assessments

Details of activity	Exposure pathways involved	Estimated rate
None identified	None identified	Not applicable

Annex 4. Ratios for determining consumption and occupancy rates for children and infants

Group	Ratio ^a	
	Child ^e /adult	Infant ^e /adult
Fish ^b	0.200	0.050
Crustaceans ^b	0.250	0.050
Molluscs ^b	0.250	0.050
Green vegetables	0.444	0.222
Other vegetables	0.500	0.200
Root vegetables	0.500	0.375
Potatoes	0.708	0.292
Domestic fruit	0.667	0.467
Milk	1.000	1.333
Cattle meat	0.667	0.222
Pig meat	0.625	0.138
Sheep meat	0.400	0.120
Poultry	0.500	0.183
Eggs	0.800	0.600
Wild/free foods ^c	0.490	0.110
Game ^d	0.500	0.140
Honey	0.789	0.789
Wild fungi	0.450	0.150
Freshwater fish ^b	0.250	0.050
External exposure over intertidal substrates ^b	0.500	0.030

Notes

^a Excepting notes b and c, consumption ratios were derived from Byrom et al., (1995) which presented data for infants aged 6 to 12 months and children aged 10 to 11 years.

^b Ratios were derived from Smith and Jones, (2003) which presented data for infants and children of unspecified ages.

^c Ratios were derived from FSA data for wild fruit and nuts for infants and 10-year-old children.

^d Game includes rabbits/hares and venison.

^e Note that the age ranges within the age groups in this table do not correspond exactly with the age ranges within the age groups used throughout the rest of this report.

Annex 5. Consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) for women of childbearing age in the Winfrith area for use in dose assessments for prenatal children

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2574/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	0.3	-	10.4	-	-	-	-	-	-	-	-	-	
2578/1/1	-	-	-	-	-	-	-	-	4.0	-	-	-	33.9	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
2581/3/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2581/5/1	18.7	3.1	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2585/2/1	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	
2585/2/2	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	235	-	-	
2586/11/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/13/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/15/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/17/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	9	30	-	-	
2586/19/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	48	166	-	-	
2586/19/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	48	166	-	-	
2586/19/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	48	166	-	-	
2586/19/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	48	166	-	-	
2586/19/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	48	166	-	-	
2595/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-	-	
2595/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	-	-	-	
2598/2/1	11.6	8.5	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2304	-	-	
2600/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836	-	-	-	
2600/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836	-	-	-	
2613/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2232	168	
2613/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2232	168	
2613/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2232	168	
2613/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2232	168	
2613/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1242	6	
2613/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1242	6	
2613/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1242	6	
2615/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	0.6	1.8	-	-	-	-	-	-	-	-	-	-	5414	470
2617/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	150	-	-	-	
2617/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	150	-	-	-	
2617/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	150	-	-	-	
2628/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	274	-	-	-	-	
2630/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	156	-	-	-	
2631/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1038	55	-	-	-	
2631/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1038	55	-	-	-	
2631/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	285	15	-	-	-	

Annex 5. Consumption rates (kg y^{-1} and l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Winfrith area for use in dose assessments for prenatal children

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
2631/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1038	220	-	-	-	
2631/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	285	-	15	-	-	-
2637/3/1	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2642/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	209	-	-
2644/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-	-	-
2653/2/1	-	-	-	-	11.0	5.4	1.3	-	3.4	-	-	-	-	-	20.8	-	-	-	-	-	-	-	-	-	-	-	4276	2920
2656/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	57	-	-	-
2657/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	768	96
2663/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228
2663/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228
2663/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228
2663/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228
2663/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1823	228
2667/6/1	23.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2668/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	652	-	-
2668/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	326	-	-	-
2671/2/1	12.3	-	-	-	2.5	15.0	1.3	-	8.3	-	-	-	-	-	5.1	4.2	1.8	-	-	-	-	-	48	-	192	-	5602	1250
2672/8/1	-	-	-	-	4.0	3.0	0.9	1.6	1.7	-	-	10.4	1.2	-	2.2	-	-	-	-	-	-	-	-	-	-	-	1126	125
2672/9/1	-	-	-	-	4.0	3.0	0.9	1.6	1.7	-	-	10.4	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2676/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1149	8
2676/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1844	8
2677/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6536	1376
2677/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2677/5/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2677/5/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2677/5/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2677/5/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2677/5/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	1458
2680/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1733	144
2680/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	75
2680/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	75
2680/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	75
2680/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	75
2680/3/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	75
2680/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5892	365
2680/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5892	365

Annex 5. Consumption rates (kg y^{-1} and l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Winfrith area for use in dose assessments for prenatal children

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary		
2681/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52		
2681/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2681/1/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1689	52	
2688/2/1	-	-	-	-	-	-	-	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2691/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	1	-	-	-	
2693/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-	-	
2693/12/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	-	
2693/12/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	-	
2693/12/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	-	
2693/12/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	-	
2693/12/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328	-	-	-	
2697/3/1	-	-	-	-	-	-	-	-	5.5	-	0.5	0.5	-	2.6	6.5	0.1	4.3	-	5.4	-	-	-	-	-	-	-	-	6231	130	
2701/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2701/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2701/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2701/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2702/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2703/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2705/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2705/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2705/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2706/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2708/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2711/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2715/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1741	48	
2747/5/1	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
2748/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	13	-	-	-	

Annex 5. Consumption rates (kg y⁻¹ and l y⁻¹) and occupancy rates (h y⁻¹) for women of childbearing age in the Winfrith area for use in dose assessments for prenatal children

Person ID number	Fish	Crustaceans	Molluscs	Marine plants/algae	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Freshwater plants	Intertidal occupancy over rock	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary	
2749/6/1	23.7	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2749/7/1	23.7	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2750/4/1	-	-	-	-	3.8	2.3	0.1	-	2.7	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
2751/4/1	-	-	-	-	0.7	29.5	0.7	-	1.1	-	-	-	-	-	3.0	1.3	0.3	0.6	-	-	-	-	-	-	-	-	-	-	
2752/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	626	782	
2760/3/1	-	-	-	-	-	-	-	18.8	-	-	-	-	-	-	15.6	-	2.7	-	-	-	-	-	-	-	-	-	-	-	
2761/3/1	32.4	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2763/2/1	-	-	-	-	-	-	-	-	-	-	-	3.9	-	-	52.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
2764/6/1	10.9	19.1	18.0	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2777/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	
2777/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	
2780/4/1	0.2	0.03	-	-	0.4	0.7	0.03	-	0.1	12.3	-	-	-	-	-	0.2	0.04	0.1	-	-	-	-	-	-	-	-	-	-	
2781/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	
2781/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	
2782/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2782/2/12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	523	-	-	
2783/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-
2783/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-
2783/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387	387	-	-
2788/2/1	5.0	-	-	-	-	-	-	-	4.1	-	39.2	-	-	2.8	-	3.8	-	-	3.8	1.1	-	-	-	-	-	-	-	-	

Notes

^a Based on National Statistics guidelines, women were deemed to be of childbearing age if they were between 15 and 44 years old. Women of unknown age were included as they were potentially women of childbearing age

Annex 6. Summary of profiles for adults in the Winfrith area for use in the assessment of total dose

Profile Name	Number of individuals	Pathway Name																									
		Crustacea	Direct	Eggs	Fish - Sea	Freshwater Plants	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Sediments	Honey	Marine plants/algae	Meat - Cow	Meat - Game	Meat - Pig	Meat - Poultry	Meat - Sheep	Mollusca	Mushrooms	Occupancy IN water	Occupancy ON water	Plume (IN; 0-0.25 km)	Plume (MID; 0.25-0.5 km)	Plume (OUT; 0.5-1 km)	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
		Notes: Units: kg	1	kg	kg	kg	kg	kg	h	kg	kg	kg	kg	kg	kg	kg	kg	kg	h	h	h	h	h	kg	kg	kg	kg
Crustacean Consumers	5	20.4	-	-	15.2	-	-	-	-	0.18	-	-	-	-	-	15.1	-	-	22	-	-	-	-	-	-	-	-
Occupants for Direct Radiation	286	0.01	1.00	1.0	0.26	-	0.77	0.23	1	0.13	-	0.06	0.08	0.12	0.05	0.42	<0.01	0.01	1	1	330	860	1550	1.1	2.3	1.6	0.59
Egg Consumers	10	-	0.80	25.9	-	-	4.3	0.36	-	-	-	-	2.9	0.33	0.23	-	0.14	-	-	-	1680	4510	7.2	7.2	9.3	2.3	
Sea Fish Consumers	41	5.3	0.12	0.25	20.6	-	1.1	0.29	21	0.13	0.02	-	0.20	-	0.20	-	2.7	0.01	14	320	-	-	570	0.19	1.4	0.33	0.40
Freshwater Plant Consumers	2	-	-	-	-	10.4	-	0.67	-	-	-	-	-	-	-	-	0.33	-	-	-	-	-	-	-	-	-	
Domestic Fruit Consumers	14	-	0.86	3.7	3.9	-	13.0	2.0	7	0.13	-	-	0.03	-	2.1	1.6	-	-	27	-	1130	1140	4090	11.1	19.9	11.2	6.5
Wild Fruit and Nut Consumers	19	0.17	0.68	2.4	2.3	0.23	5.5	3.2	5	0.38	0.05	8.3	0.80	-	0.59	-	0.56	0.01	20	34	1710	840	2410	8.5	17.2	7.4	1.8
Occupants over Sediment	22	-	-	-	1.3	-	-	-	790	-	-	-	-	-	-	-	0.16	-	32	150	-	-	-	-	-	-	
Honey Consumers	16	0.28	0.69	6.4	1.5	-	2.0	0.84	3	2.8	0.06	0.14	1.4	0.14	0.64	-	0.67	0.04	12	41	1020	-	3150	1.9	5.3	4.7	0.10
Consumers of Marine Plants and Algae	2	1.6	-	-	1.2	-	-	-	-	3.9	-	-	-	-	-	-	1.7	-	300	700	-	-	-	-	-	-	
Cattle Meat Consumers	6	-	-	2.7	3.3	0.72	2.8	2.5	-	0.15	-	41.9	2.5	-	1.9	-	-	-	-	-	-	-	-	-	-	-	
Game Meat Consumers	10	1.7	0.40	2.6	6.2	0.43	3.9	1.5	-	1.7	-	15.9	4.4	0.22	2.7	-	0.78	-	-	210	-	-	2740	-	-	-	
Pig Meat Consumers	11	-	0.27	15.7	-	-	1.9	-	-	-	-	-	-	8.0	-	0.74	-	-	-	-	-	-	1490	4.7	3.5	1.9	1.1
Poultry Meat Consumers	2	-	-	-	-	16.4	-	4	-	-	-	-	-	12.9	-	-	-	-	-	-	-	-	-	6.2	17.7	5.4	5.9
Sheep Meat Consumers	4	-	0.50	-	1.6	-	2.0	0.11	-	-	-	4.1	-	-	-	40.7	0.06	-	-	52	-	3300	-	-	-	-	
Mollusc Consumers	4	19.1	-	-	10.9	-	-	-	-	-	0.22	-	-	-	-	-	18.6	-	-	25	-	-	-	-	-	-	
Mushroom Consumers	14	0.30	0.43	4.3	1.1	1.5	0.49	0.86	-	0.40	-	-	-	0.23	-	<0.01	0.47	-	-	-	-	1200	1060	2.3	12.1	-	0.26
Occupants In Water	26	0.21	-	-	0.05	-	-	-	3	-	0.15	-	-	-	-	-	0.07	-	520	150	-	-	-	-	-	-	
Occupants On Water	27	1.4	-	-	5.0	-	-	-	-	-	-	-	0.17	-	0.20	-	0.31	-	-	1730	-	-	-	-	-	-	
Local Inhabitants (0 - 0.25 km)	12	-	1.00	1.1	-	-	4.4	1.4	-	0.45	-	-	-	-	-	-	-	-	-	-	7230	-	-	6.6	7.4	-	1.7
Local Inhabitants (0.25 - 0.5 km)	11	-	1.00	7.7	0.58	-	1.7	0.77	-	0.12	-	1.5	-	-	8.6	0.02	0.12	-	19	-	7800	-	-	4.5	12.9	0.77	1.1
Local Inhabitants (0.5 - 1 km)	44	0.02	1.00	4.4	1.2	-	3.3	0.85	2	0.58	-	0.05	0.50	0.52	0.31	0.57	-	0.03	9	-	-	7180	4.2	9.2	10.2	3.0	
Green Vegetable Consumers	16	0.20	0.88	6.8	-	-	6.4	1.4	-	0.34	0.06	-	0.02	1.3	-	1.6	0.66	0.01	-	41	990	1000	4560	17.7	25.6	13.2	6.4
Other Domestic Vegetable Consumers	24	0.13	0.67	2.3	-	-	5.4	1.5	<1	0.27	0.04	-	0.02	-	1.1	0.94	0.44	0.10	-	27	1270	660	3000	10.9	37.4	12.7	7.5
Potato Consumers	16	0.16	0.75	7.1	-	-	3.1	0.85	-	0.82	0.06	-	0.02	-	0.21	1.4	0.66	0.01	-	41	-	-	5640	7.7	17.9	30.9	6.6
Root Vegetable Consumers	6	-	0.67	<0.01	-	-	4.7	0.51	-	-	-	-	0.07	-	-	3.8	-	-	-	-	-	-	5110	14.0	30.3	25.5	22.8

Notes

1. Expressed as the proportion of the profile members who are exposed to direct radiation.
 2. Gamma ext - Sediments represents exposure over all substrates (except rock).
 3. Plume times are the sum of individuals' indoor and outdoor times.
- The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal.

Annex 7. Summary of profiles for the child age group (6 - 15 years old) in the Winfrith area for use in the assessment of total dose

Profile Name	Number of individuals	Pathway Name																		
		Crustacea	Direct	Eggs	Fish - Sea	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Sediments	Honey	Meat - Cow	Meat - Pig	Meat - Poultry	Meat - Sheep	Occupancy IN water	Occupancy ON water	Plume (OUT; 0.5-1 km)	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
		Notes:	1					2								3				
Units:	kg	-	kg	kg	kg	kg	h	kg	kg	kg	kg	kg	h	h	h	kg	kg	kg	kg	
Crustacean Consumers	3	2.9	-	-	29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Occupants for Direct Radiation	3	-	1.00	1.6	-	1.4	0.02	-	1.1	0.14	0.14	0.14	-	-	-	6590	-	-	-	-
Egg Consumers	3	-	0.33	6.5	-	1.8	0.02	-	1.1	0.14	3.7	0.14	0.29	-	-	2380	1.0	0.75	0.40	0.23
Sea Fish Consumers	3	2.9	-	-	29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic Fruit Consumers	3	-	0.33	3.1	-	2.5	0.02	-	1.1	0.14	7.1	0.14	0.77	-	-	2380	2.7	2.0	1.1	0.62
Wild Fruit and Nut Consumers	1	-	1.00	4.9	-	4.1	0.06	-	3.2	0.41	0.41	0.41	-	-	-	7140	-	-	-	-
Occupants over Sediment	1	-	-	-	-	-	-	430	-	-	-	-	-	-	290	-	-	-	-	-
Honey Consumers	1	-	1.00	4.9	-	4.1	0.06	-	3.2	0.41	0.41	0.41	-	-	-	7140	-	-	-	-
Cattle Meat Consumers	1	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	-	-	-
Pig Meat Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85
Poultry Meat Consumers	1	-	1.00	4.9	-	4.1	0.06	-	3.2	0.41	0.41	0.41	-	-	-	7140	-	-	-	-
Sheep Meat Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85
Occupants In Water	2	-	-	-	-	-	-	74	-	-	-	-	-	120	-	-	-	-	-	-
Occupants On Water	1	-	-	-	-	-	-	430	-	-	-	-	-	-	290	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)	3	-	1.00	1.6	-	1.4	0.02	-	1.1	0.14	0.14	0.14	-	-	-	6590	-	-	-	-
Green Vegetable Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85
Other Domestic Vegetable Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85
Potato Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85
Root Vegetable Consumers	3	-	-	4.0	-	1.5	-	-	-	-	9.5	-	1.1	-	-	-	3.7	2.8	1.5	0.85

Notes

1. Expressed as the proportion of the profile members who are exposed to direct radiation.
 2. Gamma ext - Sediments represents exposure over all substrates (except rock).
 3. Plume times are the sum of individuals' indoor and outdoor times.
- The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal.

Annex 8. Summary of profiles for the infant age group (0 - 5 years old) in the Winfrith area for use in the assessment of total dose

Profile Name	Number of individuals	Pathway Name																		
		Crustacea	Direct	Eggs	Fish - Sea	Freshwater Plants	Fruit - Domestic	Fruit and nuts - Wild	Honey	Marine plants/algae	Meat - Cow	Meat - Game	Meat - Pig	Meat - Poultry	Mollusca	Mushrooms	Plume (OUT; 0.5-1 km)	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Root
		Notes: 1	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2	Notes: 2
Units:	kg	-	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	h	kg	kg	kg	
Crustacean Consumers	1	9.6	-	-	5.4	-	-	-	0.11	-	-	-	-	9.4	-	-	-	-	-	-
Occupants for Direct Radiation	1	-	1.00	4.9	-	-	4.1	0.06	3.2	-	0.41	-	0.41	0.41	-	-	7140	-	-	-
Egg Consumers	2	-	0.50	4.7	-	-	2.1	0.03	1.6	-	0.20	-	1.2	0.20	-	-	3570	-	-	-
Sea Fish Consumers	2	5.3	-	-	8.1	-	-	-	-	0.06	-	-	-	-	4.7	-	-	-	-	-
Freshwater Plant Consumers	2	-	-	-	-	5.2	-	0.33	-	-	-	-	-	-	0.17	-	-	-	-	-
Domestic Fruit Consumers	4	-	0.25	1.2	0.62	0.14	2.9	0.65	0.81	-	0.85	0.47	0.10	0.10	-	-	1790	1.9	1.2	0.04
Wild Fruit and Nut Consumers	2	-	-	-	2.1	0.45	1.7	1.3	-	-	2.0	1.6	-	-	-	-	-	-	-	-
Honey Consumers	1	-	1.00	4.9	-	-	4.1	0.06	3.2	-	0.41	-	0.41	0.41	-	-	7140	-	-	-
Consumers of Marine Plants and Algae	1	9.6	-	-	5.4	-	-	-	-	0.11	-	-	-	-	9.4	-	-	-	-	-
Cattle Meat Consumers	2	-	-	-	1.2	0.27	1.0	0.78	-	-	4	0.95	-	-	-	-	-	-	-	-
Game Meat Consumers	2	-	-	-	2.1	0.45	1.7	1.3	-	-	2.0	1.6	-	-	-	-	-	-	-	-
Pig Meat Consumers	1	-	-	4.6	-	-	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-
Poultry Meat Consumers	1	-	1.00	4.9	-	-	4.1	0.06	3.2	-	0.41	-	0.41	0.41	-	-	7140	-	-	-
Mollusc Consumers	1	9.6	-	-	5.4	-	-	-	-	0.11	-	-	-	-	9.4	-	-	-	-	-
Mushroom Consumers	2	-	-	-	-	5.2	-	0.33	-	-	-	-	-	-	0.17	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)	1	-	1.00	4.9	-	-	4.1	0.06	3.2	-	0.41	-	0.41	0.41	-	-	7140	-	-	-
Green Vegetable Consumers	2	-	-	-	-	-	2.7	0.50	-	-	-	-	-	-	-	-	-	3.8	2.3	0.08
Other Domestic Vegetable Consumers	2	-	-	-	-	-	2.7	0.50	-	-	-	-	-	-	-	-	-	3.8	2.3	0.08
Root Vegetable Consumers	2	-	-	-	-	-	2.7	0.50	-	-	-	-	-	-	-	-	-	3.8	2.3	0.08

Notes

1. Expressed as the proportion of the profile members who are exposed to direct radiation.
 2. Plume times are the sum of individuals' indoor and outdoor times.
- The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal.

Annex 9. Summary of profiles for women of childbearing age in the Winfrith area, for use in assessments of total dose to prenatal children

Profile Name	Number of individuals	Pathway Name																											
		Crustacea		Direct	Eggs	Fish - Sea	Freshwater Plants	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Sediments	Honey	Marine plants/algae	Meat - Cow	Meat - Game	Meat - Pig	Meat - Poultry	Meat - Sheep	Milk	Mollusca	Mushrooms	Occupancy IN water	Occupancy ON water	Plume (IN; 0-0.25 km)	Plume (MID; 0.25-0.5 km)	Plume (OUT; 0.5-1 km)	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
		Units:	kg	-	kg	kg	kg	kg	kg	h	kg	kg	kg	kg	kg	kg	kg	l	kg	kg	h	h	h	h	h	h	kg	kg	kg
Crustacean Consumers	4	10.2	-	-	17.5	-	-	-	-	-	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Occupants for Direct Radiation	63	-	1.00	0.59	0.19	-	0.30	0.08	<1	0.13	-	<0.01	0.09	0.17	0.04	0.02	-	-	-	3	-	140	450	1590	0.28	0.37	0.03	0.06	
Egg Consumers	2	-	0.50	36.4	-	-	1.7	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	3600	5.5	2.7	-	0.66
Sea Fish Consumers	9	5.6	0.11	0.57	19.5	-	0.92	0.47	5	0.20	0.02	-	-	-	-	-	-	2.6	-	21	260	-	-	760	0.28	1.7	-	0.15	
Freshwater Plant Consumers	1	-	-	-	-	10.4	-	0.67	-	-	-	-	-	-	-	-	-	-	0.33	-	-	-	-	-	-	-	-	-	-
Domestic Fruit Consumers	5	-	0.60	6.5	3.5	0.22	5.1	1.7	10	1.2	-	7.9	1.8	0.11	1.1	6.8	-	-	-	38	-	-	-	4080	2.7	4.1	-	0.53	
Wild Fruit and Nut Consumers	2	-	0.50	2.6	8.6	0.54	6.2	4.0	24	0.91	-	19.6	1.9	-	1.4	-	-	-	-	96	-	-	-	3430	1.3	7.5	-	0.66	
Occupants over Sediment	6	-	-	-	-	-	-	-	910	-	-	-	-	-	-	-	-	-	-	55	140	-	-	-	-	-	-	-	-
Honey Consumers	4	-	0.75	7.5	3.1	-	3.4	1.2	12	2.7	-	0.14	1.4	0.14	0.64	-	-	-	-	48	-	1470	-	3300	0.63	3.8	4.7	0.33	
Consumers of Marine Plants and Algae	1	19.1	-	-	10.9	-	-	-	-	-	0.22	-	-	-	-	-	-	18.0	-	-	-	-	-	-	-	-	-	-	-
Cattle Meat Consumers	1	-	-	-	5.0	1.1	4.1	3.8	-	-	-	39.2	3.8	-	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Game Meat Consumers	2	-	0.50	3.2	2.5	0.54	4.8	1.9	-	2.2	-	19.9	4.6	0.27	2.7	-	-	-	-	-	-	-	-	-	3180	-	-	-	-
Pig Meat Consumers	3	-	0.33	18.1	-	-	1.1	-	-	-	-	-	-	8.2	-	0.77	-	-	-	-	-	-	-	-	420	2.7	2.0	1.1	0.62
Poultry Meat Consumers	2	-	0.50	3.2	2.5	0.54	4.8	1.9	-	2.2	-	19.9	4.6	0.27	2.7	-	-	-	-	-	-	-	-	-	3180	-	-	-	-
Sheep Meat Consumers	1	-	-	-	-	-	4.0	0.23	-	-	-	-	-	-	-	33.9	-	-	-	-	-	-	-	-	-	-	-	-	-
Milk Consumers	1	0.03	-	-	0.21	-	0.08	0.17	-	0.04	-	-	-	-	-	-	12.3	-	0.07	-	-	-	-	-	-	0.40	0.72	-	0.03
Mollusc Consumers	1	19.1	-	-	10.9	-	-	-	-	-	0.22	-	-	-	-	-	-	18.0	-	-	-	-	-	-	-	-	-	-	-
Mushroom Consumers	2	-	-	1.5	-	5.2	0.57	0.99	-	0.14	-	-	-	-	-	-	-	0.45	-	-	-	-	-	-	0.34	14.7	-	0.34	
Occupants In Water	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	710	-	-	-	-	-	-	-	-	-
Occupants On Water	1	8.5	-	-	11.6	-	-	-	-	-	-	-	-	-	-	-	-	0.60	-	2300	-	-	-	-	-	-	-	-	-
Local Inhabitants (0 - 0.25 km)	1	-	1.00	2.7	-	-	0.60	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	5880	-	-	-	-	-	-	-
Local Inhabitants (0.25 - 0.5 km)	16	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1790	-	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)	6	-	1.00	5.4	2.0	-	2.9	0.71	8	1.0	-	0.09	0.90	0.09	0.43	-	-	-	-	32	-	-	-	6810	2.3	3.4	-	0.44	
Green Vegetable Consumers	4	-	0.50	5.8	-	-	2.4	0.13	-	-	-	-	-	5.2	-	0.58	-	-	-	-	-	-	-	2110	5.7	3.4	0.81	0.81	
Other Domestic Vegetable Consumers	2	-	0.50	4.1	6.1	-	4.7	2.8	24	1.0	-	-	-	-	-	-	-	0.28	96	-	-	-	-	3430	1.6	22.2	-	1.0	
Potato Consumers	1	-	-	15.6	-	-	-	-	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.8	-	-
Root Vegetable Consumers	5	-	0.60	6.2	2.5	-	3.2	1.1	10	0.42	-	-	-	4.2	-	0.46	-	-	0.11	38	-	-	-	3060	4.5	11.2	0.65	1.0	

Notes

- Expressed as the proportion of the profile members who are exposed to direct radiation.
- Gamma ext - Sediment represents exposure over all substrates (except rock)
- Plume times are the sums of individuals' indoor and outdoor occupancy rates in each of the direct radiation zones. The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal.

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About us

The Centre for Environment, Fisheries and Aquaculture Science is the UK's leading and most diverse centre for applied marine and freshwater science.

We advise UK government and private sector customers on the environmental impact of their policies, programmes and activities through our scientific evidence and impartial expert advice.

Our environmental monitoring and assessment programmes are fundamental to the sustainable development of marine and freshwater industries.

Through the application of our science and technology, we play a major role in growing the marine and freshwater economy, creating jobs, and safeguarding public health and the health of our seas and aquatic resources.

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