Centre for Environment Fisheries & Aquaculture Science

Cefas

Radiological Habits Survey: Aldermaston and Burghfield, 2022

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1. Key Points

- The aquatic survey area had changed since 2011 because the Burghfield site was granted a permit variation in 2021 to allow the discharge of radioactive liquid effluent to the Burghfield Brook. The terrestrial and direct radiation survey areas had also changed due to an expansion of the Burghfield nuclear licensed site.
- Trapping signal crayfish commercially was identified within the aquatic survey area along the River Kennet. The catch was distributed to London for consumption.
- As in 2011, the consumption of food from the aquatic survey area was not identified in 2022. Although, in 2011, there was anecdotal evidence that coarse fish were being caught for consumption, which was not reported in 2022.
- In 2022, the activities undertaken throughout the aquatic survey area were kayaking, paddleboarding, swimming, trapping signal crayfish, fly fishing, riverbank maintenance and being on a boat.
- Discharges from the Aldermaston site were released to the Silchester Brook via a sewage treatment works. In 2022, there was a decrease in the occupancy rates of employees in close proximity to liquid sewage sludge and dried sewage sludge compared to the 2011 survey.
- In 2022, there was a significant increase in the consumption of honey. Conversely, the consumption rates significantly decreased for milk, root vegetables and potato. The consumption of pig meat was not identified in 2022.
- A new residential estate in Tadley, with approximately 70 houses and one apartment block was built within 1 km to the south of the Atomic Weapons Establishment Plc Aldermaston nuclear site.
- The area around the Aldermaston site was the main location for commercial activities within the direct radiation survey area. Additionally, a small supermarket was under construction within 0.3 km of the Aldermaston nuclear licensed site boundary.
- The occupancy rates in the direct radiation survey area were similar in 2011 and 2022 for the 0 – 0.25 km zones. Occupancy rates in the >0.25 – 0.5 km and >0.5 – 1.0 km zones increased in 2022, in comparison to 2011 data.

2. Summary

This report presents the results of a survey conducted in 2022 to determine the habits and consumption patterns of people living, working and pursuing recreational activities in the vicinity of the Atomic Weapons Establishment Plc (AWE) at the Aldermaston and Burghfield nuclear licensed sites in Berkshire. Aldermaston and Burghfield are separate nuclear sites approximately 8 km apart and for the purposes of this survey they are considered together as a single site. The Burghfield nuclear site is located in Burghfield village, approximately 7 km south-west of Reading town centre, and the Aldermaston nuclear site is located to the south-west in Aldermaston village. Both sites discharge gaseous wastes via stacks to the atmosphere and contain sources of direct radiation. The Aldermaston site discharges liquid wastes to the Silchester Brook via the Silchester Sewage Treatment Works and to Aldermaston Stream. The Burghfield site discharges liquid wastes to the Burghfield Brook via an onsite sewage treatment works. Areas likely to be most affected by the discharges and sources of radiation were defined as the aquatic survey area for liquid discharges, 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.

The following potential exposure pathways were investigated:

- The consumption of food from the aquatic survey area
- Activities and occupancy over river washed substrates
- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- Occupancy in close proximity to liquid sewage sludge and dried sewage sludge
- 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

Information was collected from members of the public by means of interviews and the data obtained for 499 individuals are presented and discussed. High rates of consumption, occupancy over river washed substrates 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 (Figure 4 and Figure 5) covered three sections which were potentially affected by liquid radioactive effluent discharges from the Aldermaston and Burghfield nuclear sites:

- The waterways to the north of the Aldermaston site, from the Aldermaston stream to Tyle Mill Lock
- The Silchester Brook to the south of the Aldermaston site, from the Silchester Sewage Treatment Works (SSTW) to the confluence with the West End Brook
- The Burghfield Brook to the east of the Burghfield nuclear site, from the onsite sewage treatment works to its confluence with the Foudry Brook

The only commercial fishery identified was trapping signal crayfish along the River Kennet. The catch was processed and distributed to London for human consumption. Angling was identified taking place along the River Kennet within the aquatic survey area. No interviewees were consuming foods from the aquatic survey area.

Activities identified in and on the water during the survey included kayaking, paddleboarding, swimming, fly fishing, trapping signal crayfish and spending time on a narrowboat. The activities undertaken by adults in the high-rate groups for occupancy over river washed substrates included riverbank maintenance and commercial signal crayfish trapping.

The terrestrial survey area

The terrestrial survey area (Figure 6 and Figure 7) covered the land within 5 km from the centre of the Aldermaston and Burghfield nuclear sites. The land within the terrestrial survey area is mainly farmland with residential and commercial areas. Interviews were conducted at 18 working farms with land in the terrestrial survey area, where beef, milk, lamb, goat, turkey, barley, beans, linseed, rapeseed, oats, and wheat were produced for human consumption. Barley, grass (for silage and haylage), maize, rye, spelt, and wheat were grown for animal feed.

Interviews were conducted with plot holders at eight allotment sites within the survey area. A wide variety of fruit and vegetables were grown on the allotments and a small number of private gardens were identified growing small quantities of produce. Five beekeepers were interviewed with hives in the survey area and the consumption of honey was recorded. Game shooting was identified taking place on farmland with pheasant, partridge, pigeon and venison being consumed by the farming families and residents. Wild foods including blackberries, garlic, plums, mushrooms, and sloes were collected and consumed.

Foods from the terrestrial survey area were consumed from the following 13 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; poultry; eggs; wild/free foods; honey; wild fungi; venison; goat meat. 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; domestic fruit; milk; eggs; wild/free foods; honey.

The human consumption of groundwater was identified at two farms which used borehole water for their drinking water. Livestock were consuming mains water, borehole water and had access to some streams for drinking water.

The potential transfer of contamination off-site by wildlife was investigated since radionuclides could enter the food chain or contaminate the environment through this pathway. The sites do not undertake any routine wildlife controls, since the buildings are enclosed, and it is highly unlikely that wildlife could enter controlled areas.

The direct radiation survey area

The direct radiation survey area (Figure 8 and Figure 9) covered the land within 1 km of the Aldermaston and Burghfield nuclear licensed site boundaries. 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 nuclear licensed site boundaries. 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 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 Aldermaston and Burghfield site centres. Most of the measurements taken outdoors of the properties were equal or lower than the background measurements. However, several of the indoor measurements were notably higher than the background measurements. The measurements taken inside properties are expected to be higher than those taken outdoors because building materials and ground type can increase the gamma dose rates.

Comparisons with the previous survey

Comparisons were made with the results from the previous Aldermaston and Burghfield habits survey in 2011, which were for adults only. Reasons for changes in the consumption and occupancy rates were identified for certain pathways and these are presented in Section 10 of the report. The consumption of foods from the aquatic survey area was not identified in both 2011 and 2022.

The occupancy over river washed substrates increased in 2022. In 2011, activities were undertaken over grass and over mud, sand and stones, but in 2022 the activities were undertaken over grass and over mud in the aquatic survey area (Figure 1).

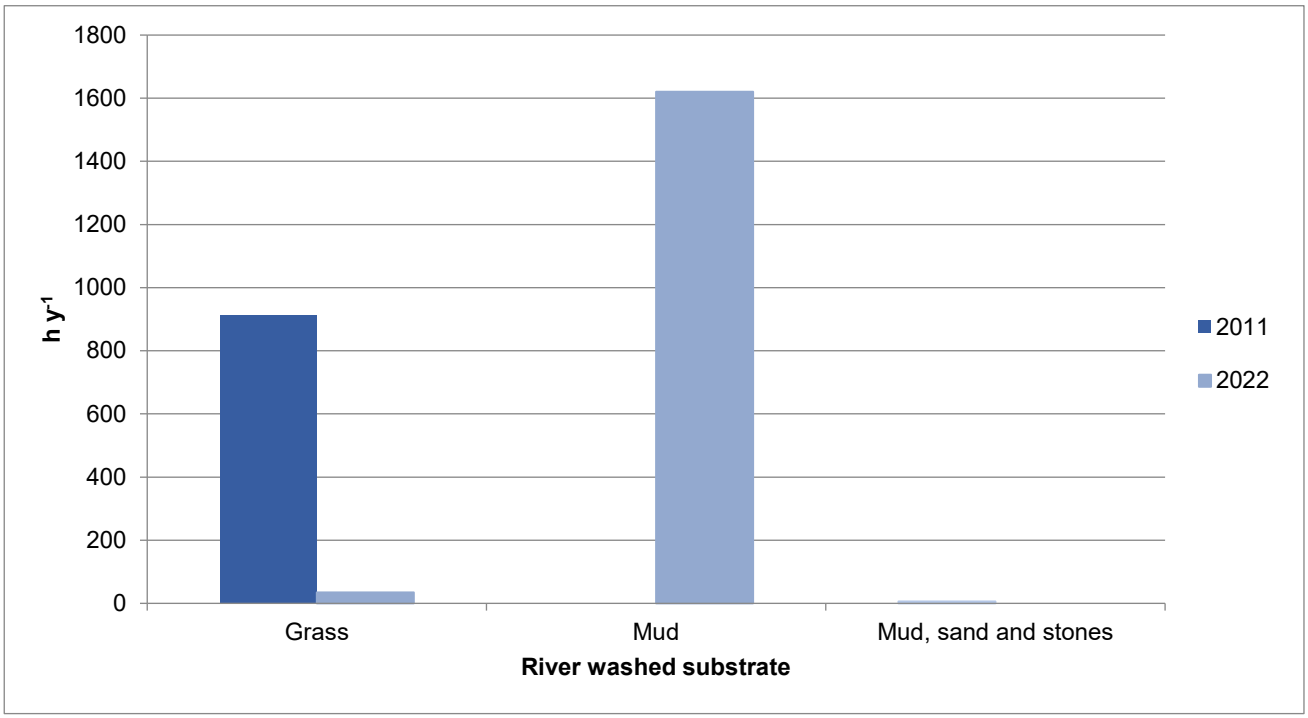

Figure 1. Comparison between 2011 and 2022 mean rates for the high-rate groups for occupancy over river washed substrates

The most notable changes in the terrestrial foods in 2022 was the increase in the consumption rate of honey, and the decrease in the consumption rate of root vegetables, potato, poultry, eggs and milk, compared with 2011 (Figure 2). The consumption of goat meat was identified in 2022. The consumption of cattle meat, pig meat, sheep meat, freshwater fish and freshwater crayfish was not identified in 2022.

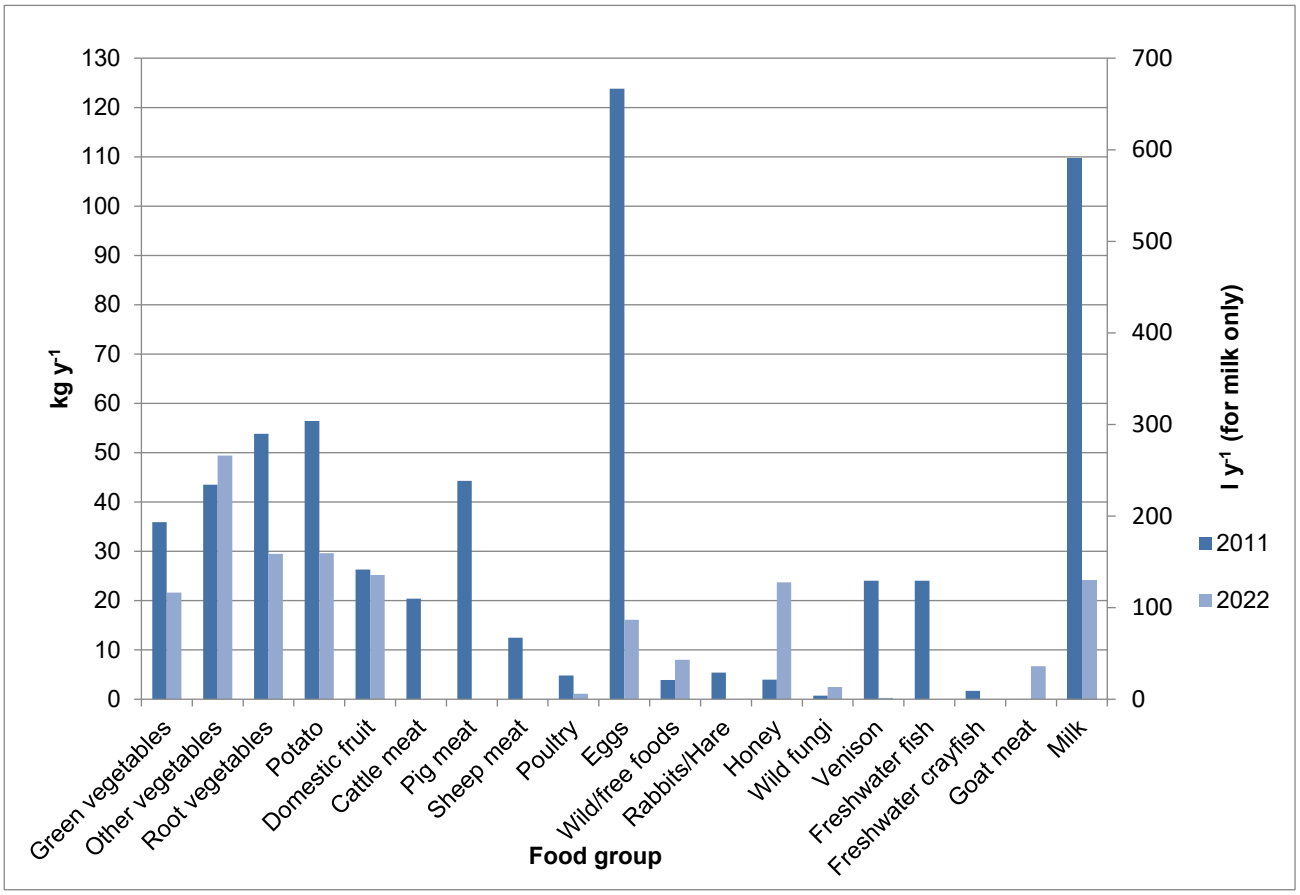

Figure 2. Comparison between 2011 and 2022 mean consumption rates for the high-rate groups for terrestrial foods

The maximum occupancy rates in the direct radiation survey area in 2022 were broadly similar to those in 2011 (Figure 3). In the >0.25 – 0.5 km zone in 2011, numerous residents were approached for an interview, but all declined. In 2022, residences were interviewed in this zone. Therefore, occupancy rates in the >0.25 – 0.5 km zone increased in 2022. The highest indoor, outdoor and total occupancy rates across the three zones were for residents, farmers and farm workers.

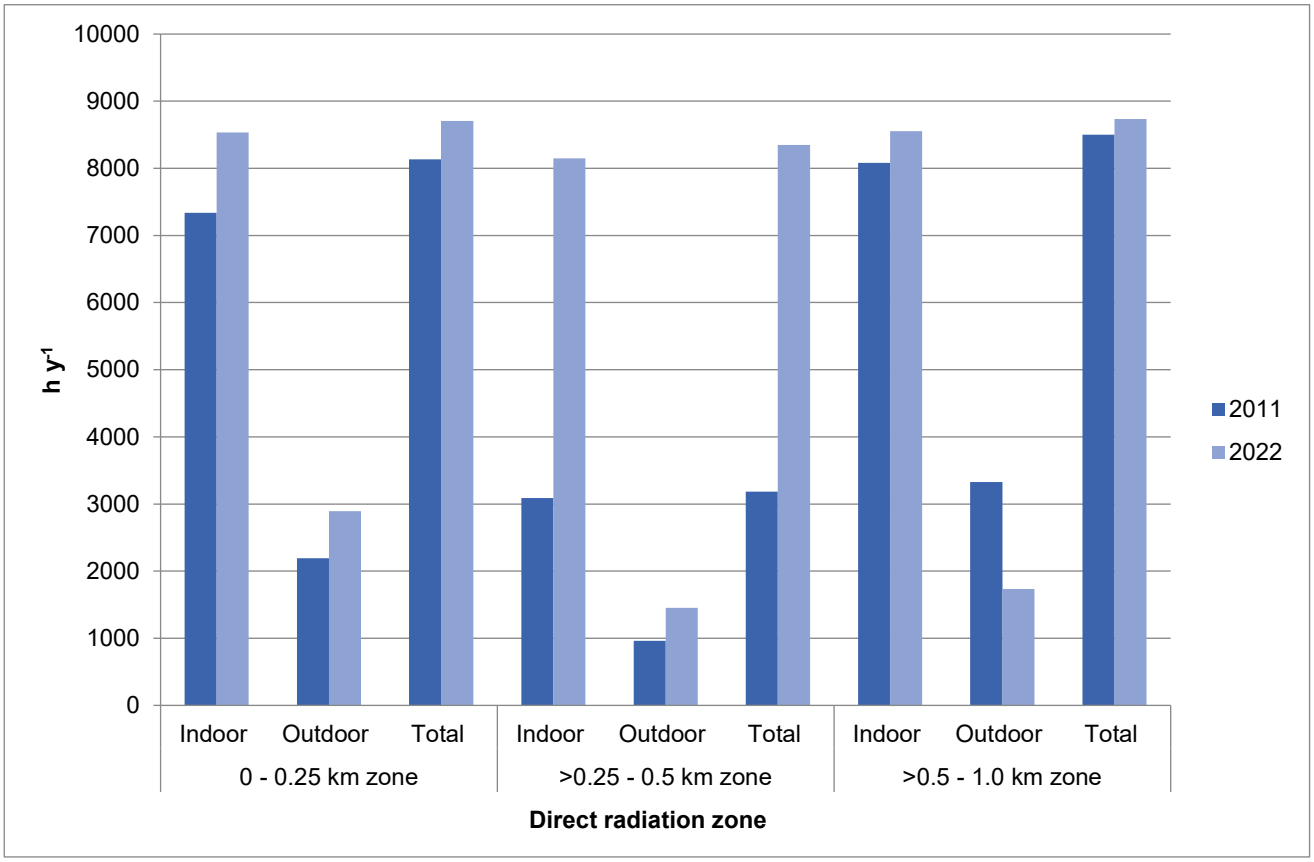

Figure 3. Comparison between 2011 and 2022 maximum direct radiation occupancy rates

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

The foods and river washed locations identified in the 2022 Aldermaston and Burghfield 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 12.2 for considering sample selection for the Food Standards Agency monitoring programme. The current environmental monitoring programme carried out for the Environment Agency adequately covers the Aldermaston and Burghfield area and no changes are suggested.

3. Introduction

Members of the public might be exposed to radiation as a result of the operations of the Aldermaston and Burghfield nuclear licensed sites, either through the permitted discharges of liquid or gaseous radioactive wastes into the local environment, or from radiation emanating directly from the sites. This report provides information on activities carried out by members of the public in the vicinity of the Aldermaston and Burghfield nuclear licensed sites, 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 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’.

3.1. Regulatory framework

In England, the EA regulates the discharges of radioactive waste under Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016). These 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 ONR has implemented this legislation and is also responsible for regulating, under the Ionising Radiations Regulations 2017 (IRR 17) (UK Parliament, 2017), the exposure of the public to direct radiation from the operations occurring on these sites.

Appropriate discharge limits are set by the EA, after wide-ranging consultations that include the FSA. The FSA 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 FSA also ensures that public radiation exposure via the food chain is within acceptable limits.

3.2. 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 17. The requirement to observe the conditions laid down in the Basic Safety Standards (BSS) in England and Wales is incorporated in Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016). 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 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, considering the effective pathways of transmission of radioactive substances. Guidance on the principles underlying prospective radiological assessments (for 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 (for assessments 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 and others, 2005). NDAWG agreed that the optimal method for performing retrospective dose assessments would be to use habits profiles (profiling method) as described in Camplin and others (2005). This approach was adopted in Radioactivity in Food and the Environment (RIFE) publications, (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2022). 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, UK Health Security Agency (formerly, Public Health England) and the FSA jointly produced an update of the 2002 interim guidance and principles for assessing prospective doses (EA, SEPA, NIEA, HPA and FSA, 2012).

4. The survey

4.1. Site activity

The Aldermaston and Burghfield nuclear licensed sites are located in Berkshire approximately 8 km apart. The Atomic Weapons Establishment Plc (AWE) Aldermaston site provides and maintains the fundamental components of the UK's nuclear deterrent including research, design, and manufacturing facilities. The AWE Burghfield site is responsible for the final assembly and maintenance of nuclear warheads whilst in service, as well as their decommissioning.

AWE is a non-departmental public body, wholly owned by the Ministry of Defence (MOD). AWE owns and operates the Aldermaston and Burghfield sites and holds the nuclear site licence on behalf of the MOD. Under the radioactive substances provisions of Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016), AWE is permitted to undertake radioactive substances activities at the nuclear sites. This includes permission to discharge gaseous radioactive wastes via stacks to the atmosphere and liquid radioactive wastes to the Aldermaston Stream, Silchester Brook and Burghfield Brook. The AWE sites are licensed for the purposes of operating certain activities prescribed under the Nuclear Installations Act, 1965. The sites contain sources of direct radiation. 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, 2022).

4.2. Survey objectives

The Centre for Environment, Fisheries & Aquaculture Science (Cefas) undertook the Aldermaston and Burghfield habits survey in 2022 on behalf of the Environment Agency (EA), the Food Standards Agency (FSA), and the Office for Nuclear Regulation (ONR). 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 Aldermaston and Burghfield nuclear sites.

Specifically, investigations were conducted into the following:

- The consumption of food from the aquatic survey area
- Activities and occupancy over river washed substrates

- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- Occupancy in close proximity to liquid sewage sludge and dried sewage sludge
- 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

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

4.3. 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 deposition from gaseous discharges, and a direct radiation survey area relating to ionising radiation emanating directly from the Aldermaston and Burghfield nuclear licensed sites.

The aquatic survey area (Figure 4 and Figure 5) covered three potential discharge routes:

- The waterways to the north of the Aldermaston site, from the Aldermaston stream to Tyle Mill Lock
- The Silchester Brook to the south of the Aldermaston site, from the Silchester Sewage Treatment Works (SSTW) to the confluence with the West End Brook
- The Burghfield Brook to the east of the Burghfield nuclear site, from the onsite sewage treatment works to its confluence with the Foudry Brook

The terrestrial survey area (Figure 6 and Figure 7) covered the land and waterways within 5 km from the centre of the two sites (National Grid Reference: Aldermaston, SU 600 637 and Burghfield, SU 681 680), to encompass the main areas of potential deposition from gaseous discharges.

The direct radiation survey area (Figure 8 and Figure 9) covered the land and waterways within 1 km of the Aldermaston and Burghfield nuclear licensed site boundaries. 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 aquatic, terrestrial and direct radiation survey areas had changed since the previous Aldermaston and Burghfield habits survey conducted by Cefas in 2011 (Ly and others, 2012). The changes to the terrestrial and direct radiation survey areas were due to an expansion of the Burghfield nuclear licensed site. The Aldermaston site had not changed since 2011. The changes to the aquatic survey area were due to the 2021 Burghfield permit variation to permit discharges of radioactive liquid effluent to the Burghfield Brook.

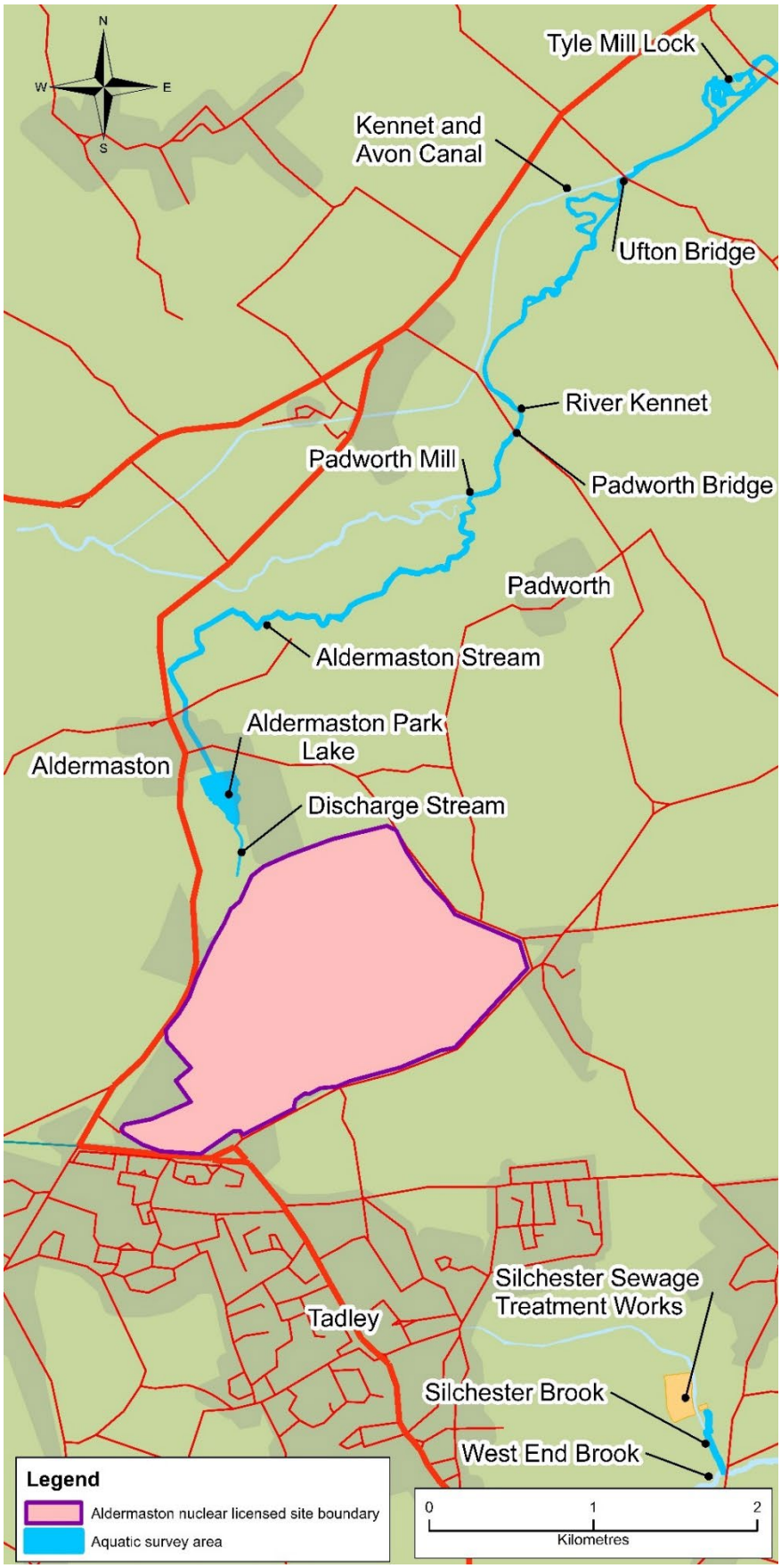

Figure 4. The aquatic survey area (Aldermaston)

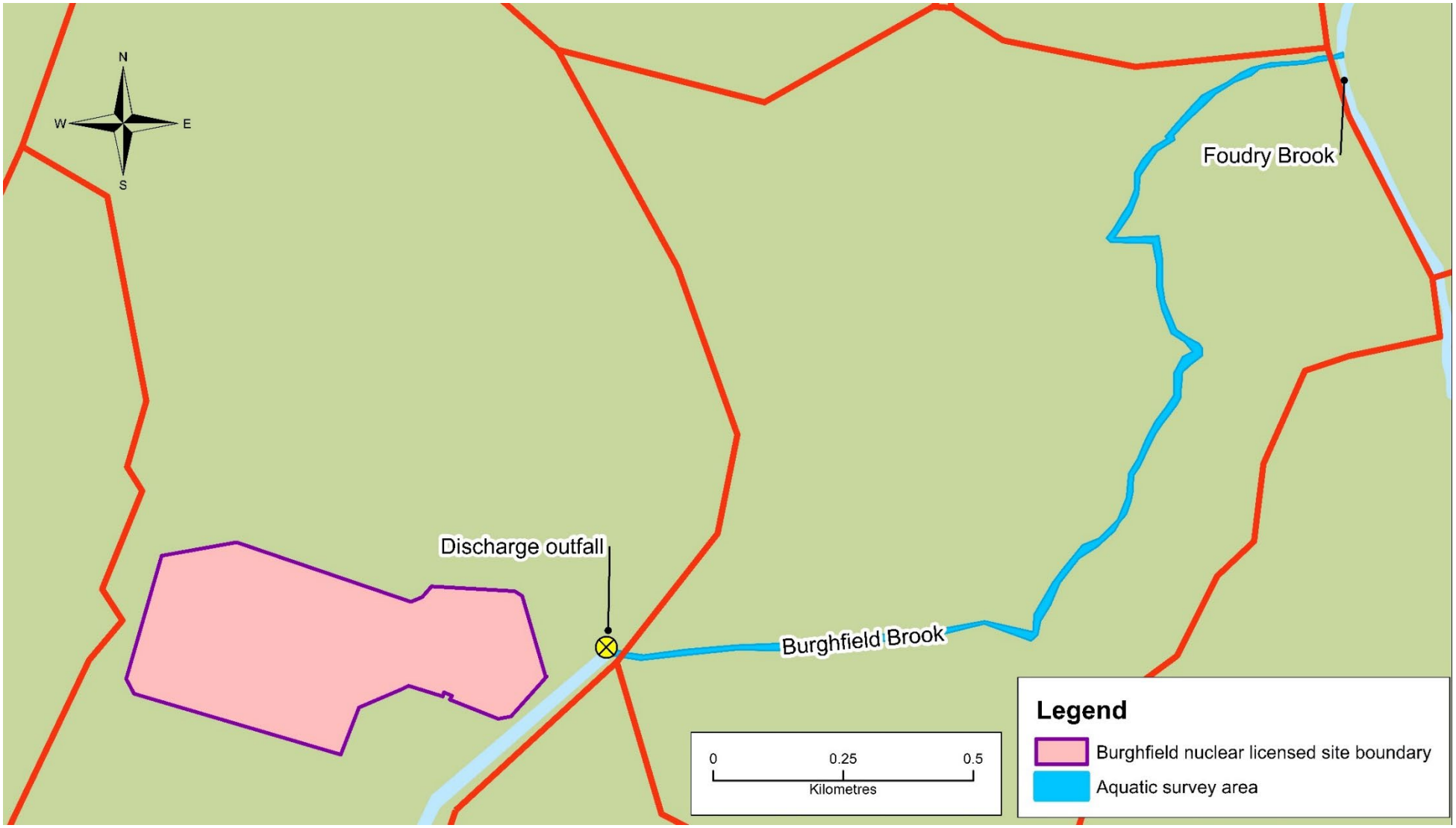

Figure 5. The aquatic survey area (Burghfield)

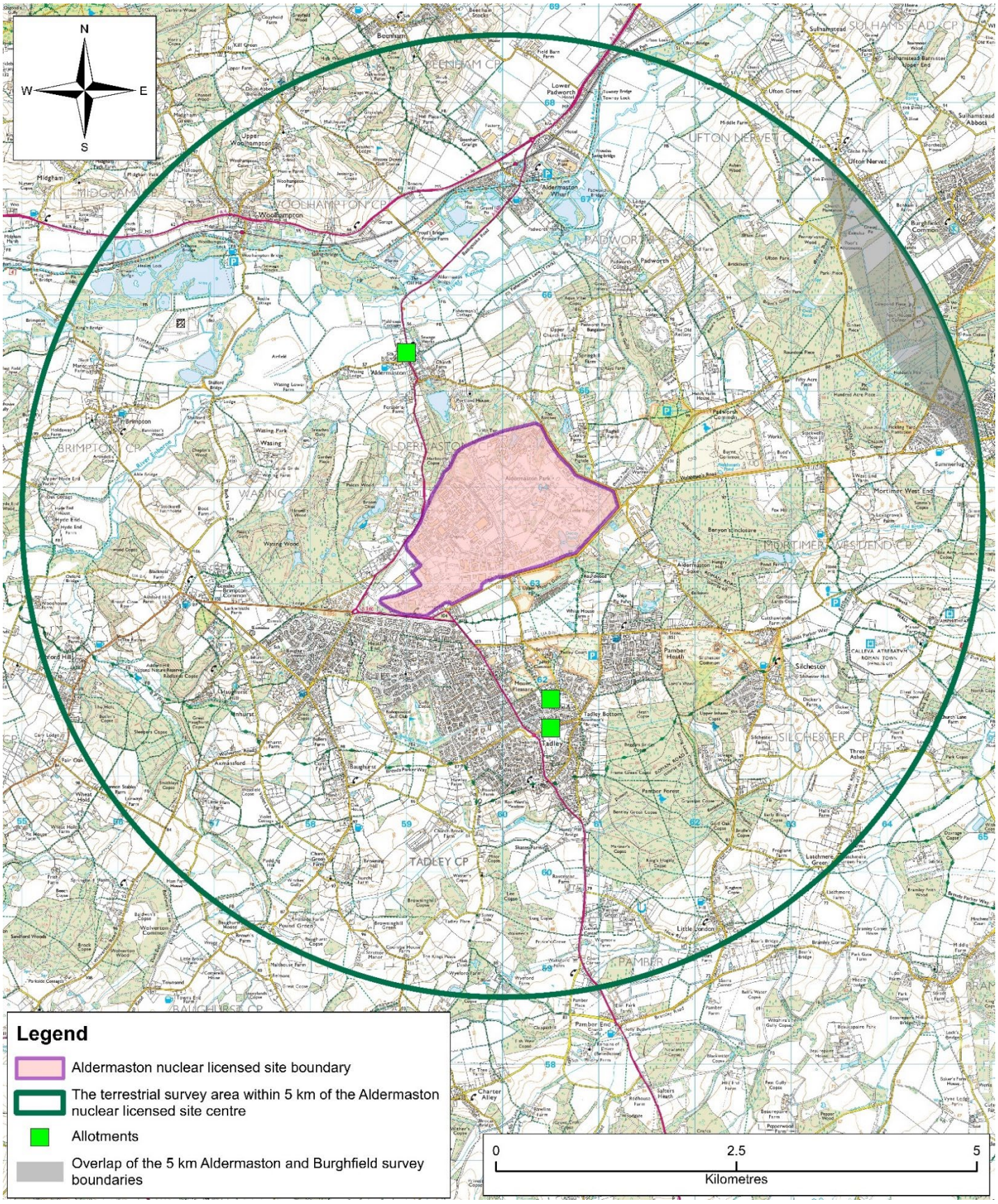

Figure 6. The terrestrial survey area within 5 km of the Aldermaston nuclear licensed site centre

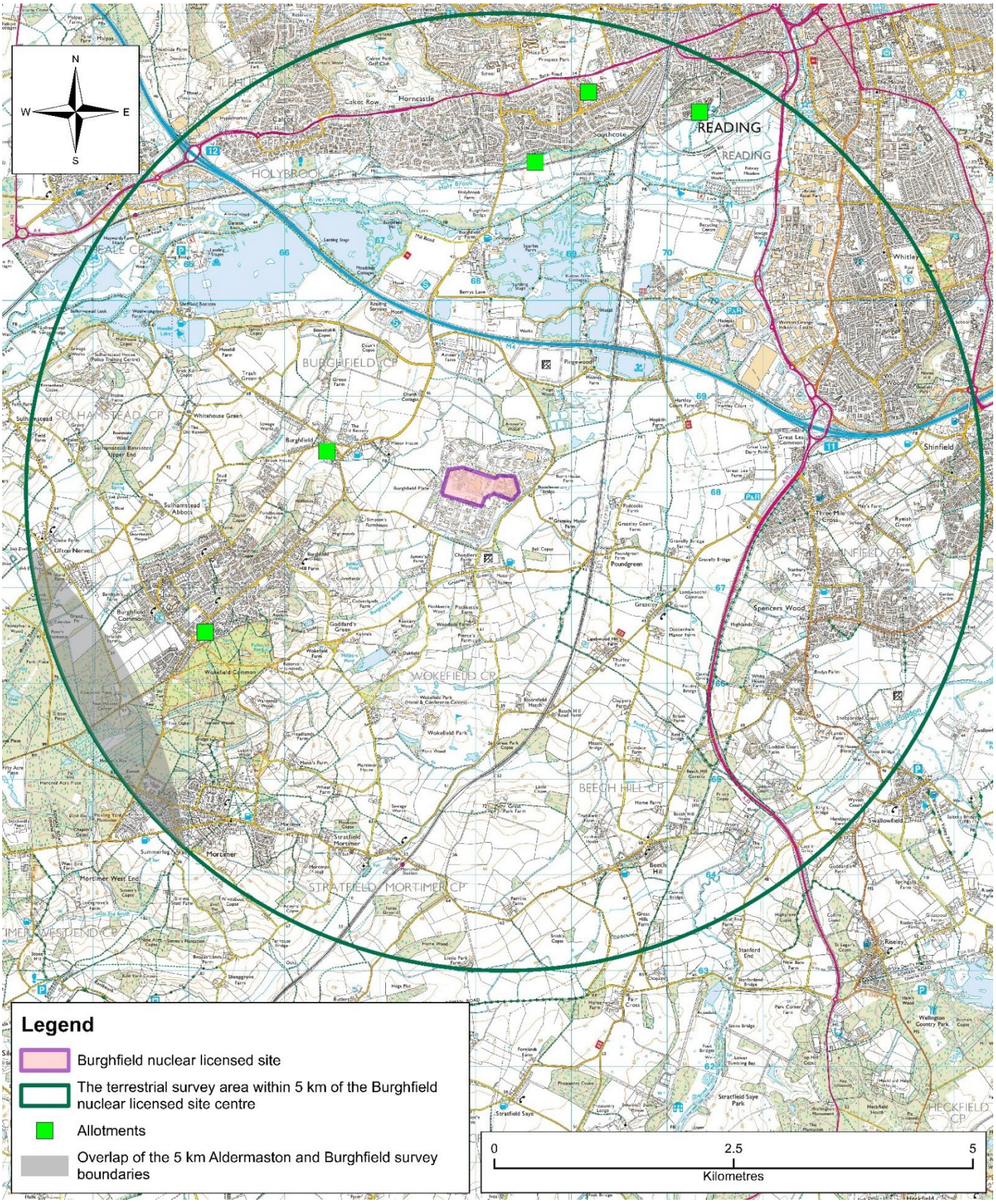

Figure 7. The terrestrial survey area within 5 km of the Burghfield nuclear licensed site centre

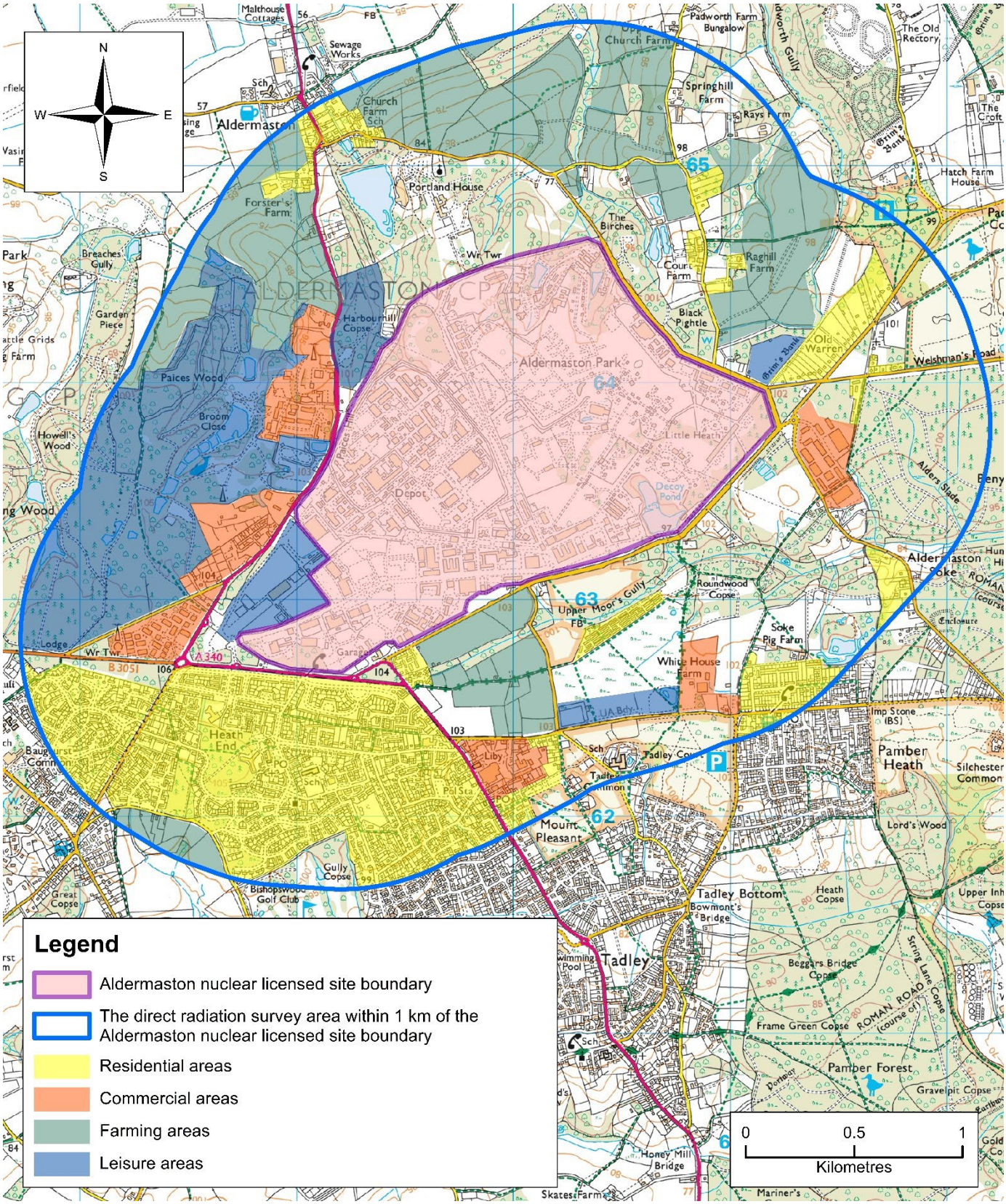

Figure 8. The direct radiation survey area within 1 km of the Aldermaston nuclear licensed site boundary

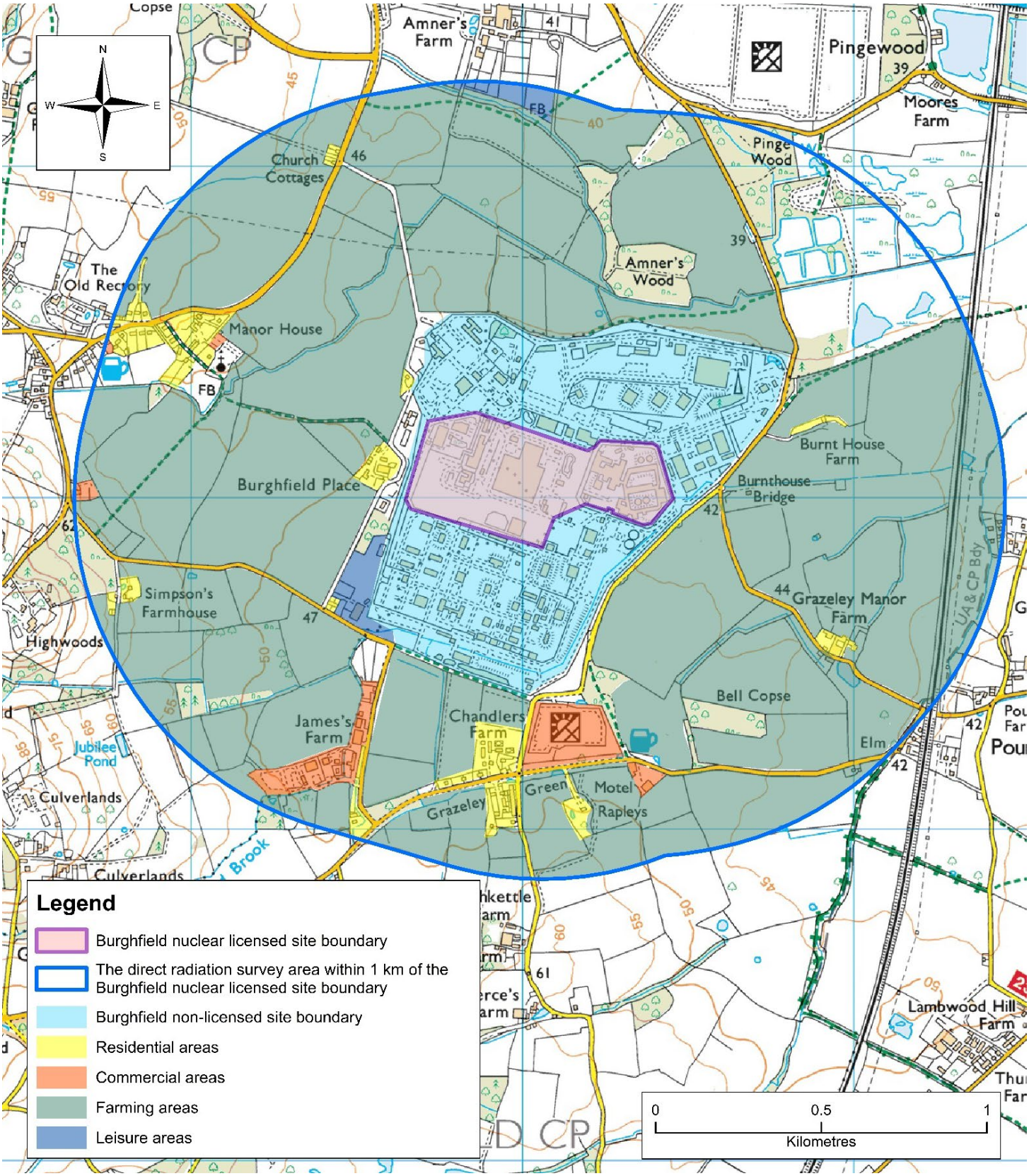

Figure 9. The direct radiation survey area within 1 km of the Burghfield nuclear licensed site boundary

4.4. Conduct of the survey

As part of the pre-survey preparation, the EA, the FSA and the ONR 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 Aldermaston and Burghfield nuclear licensed sites. People with local knowledge of the survey area were contacted for information relevant to the various exposure pathways. These included Reading Borough Council and Parish Councils who provided information and access to local allotments, and a local angling assocation who provided information on angling permits and regulations along the River Kennet.

The fieldwork was carried out from the 21st July to the 29th July 2022 using survey techniques consistent with the previous Aldermaston and Burghfield habits survey report (Ly and others, 2012). During the fieldwork, a meeting was held between members of the survey team and representatives from AWE. The discussions 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 meetings:

- The Burghfield nuclear licensed site boundary has changed due to the Mensa Facility expansion. The Mensa Facility at the Burghfield site was still undergoing development in 2022, and it is expected to be operational by 2025.
- The Burghfield site now has permission to discharge radioactive liquid waste via an onsite sewage treatment works to the Burghfield Brook.
- No changes had been made to the Aldermaston nuclear licensed site boundary, outfalls or locations of sources of direct radiation since 2011. However, an additional non-nuclear building has been built on the Aldermaston nuclear site housing chemical processes which release short bursts of gamma radiation. Additionally, the level of radioactivity in the Intermediate Level Waste stores at the Aldermaston site has increased.
- Two redundant stacks have been decommissioned and removed from the Aldermaston site.
- The sites operated a sustainability policy and did not undertake any routine wildlife control measures, since the buildings are enclosed, and it is highly unlikely that wildlife could enter controlled areas.
- Information about potential exposure pathways and activities in the area included angling locations and activities in the direct radiation survey area.

- Changes to the area around the site included:
    - A new housing development in the direct radiation survey area.
    - A new supermarket was under construction within the direct radiation survey area.

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, people spending time on river washed substrates, farmers, allotment holders, 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 river washed 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 AWE nuclear licensed sites, but targeted subsets or groups, 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 17. 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 the most recent UK Office of National Statistics residential data for electoral wards (www.ons.gov.uk) there were approximately 73,400 people living in the terrestrial survey area, although information was obtained from a significantly smaller number of residents. The survey did not include employees or contractors at the nuclear licensed sites while they were at work. This is because dose criteria applicable to these people whilst at work and the dose assessment methods are different from those for 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.

5. Methods for data analysis

5.1. 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 (for example: 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, Annex 2 for children and Annex 3 for 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 is presented in Annex 4. In 2011, it was reported that members of various communities were fishing for and consuming coarse fish from the River Kennet and the Kennet and Avon Canal. It could not be confirmed if this was still taking place in 2022, therefore, it is suggested that a consumption rate of 1 kg y^{-1} for coarse fish be considered for use in radiological dose assessments (Annex 4).

5.2. 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 (for example: 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 converted 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.

5.3. 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' expert 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 18. 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. For external exposure over river washed sediments, occupancies over the same substrate (for example: mud and grass) are grouped together.

Data were structured into age groups because different dose coefficients (in other words, the factors which convert intakes of radioactivity into dose) can apply to different ages. The names used for the age groups, based on the recommendations in ICRP 103 (ICRP, 2007), are shown in Table 1.

Table 1. Names of age groups and range of ages within each age group

Name of age group	Age range in group
Infant	0 to 5-year-old
Child	6-year-old to 15-year-old
Adult	16-year-old and over

For direct radiation pathways, the data were grouped into distance zones from the nuclear site boundaries 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 for both nuclear licensed sites. These distance bands are also useful when assessing exposure to gaseous discharges.

5.4. Approaches for the identification of high rates

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

1) The 'cut-off' method described by Hunt and others (1982) was used. 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, river washed substrate and handling pathway identified in the survey.
2) 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 and others, 1995.

The mean rates for the high-rate groups for children and infants for consumption, occupancy over river washed substrates 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 occupancy of river washed substrates pathways, based on generic 97.5th percentile rates, are provided in Annex 5. The age ranges within the age groups in Annex 5 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 dose, consumption and occupancy rates are provided in Annex 6 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, the maximum occupancy rates are used instead of calculating the mean occupancy rates and 97.5th percentile rates. This is due to the complex nature of the direct radiation dose rates, which are dependent on both the distance and direction from the primary sources of direct radiation on site (the spatial extent). Additional factors include the local geography and geology, as well as other structures on site, which can provide additional shielding between these sources on site and the local receptor points for direct radiation. For simple (cautious) dose assessment of direct radiation, it is appropriate to use the maximum dose and occupancy rates.

5.5. 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 and others, 2005. The profiles for adults are used to assess total dose integrated across all pathways of exposure in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA, and SEPA, 2022).

Matrices of profiles for adults, children, infants and women of childbearing age are presented in Annex 7, Annex 8, Annex 9 and Annex 10. 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.

5.6. 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 considered 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 reports.

6. Aquatic radiation pathways

6.1. Aquatic survey area

The aquatic survey area (shown in Figure 4 and Figure 5) covered three sections which were potentially affected by liquid radioactive effluent discharges from the Aldermaston and Burghfield nuclear sites:

- The waterways to the north of the Aldermaston site, from the Aldermaston stream to Tyle Mill Lock
- The Silchester Brook to the south of the Aldermaston site, from the Silchester Sewage Treatment Works (SSTW) to the confluence with the West End Brook
- The Burghfield Brook to the east of the Burghfield nuclear site, from the onsite sewage treatment works to its confluence with the Foudry Brook

The aquatic survey area is described in detail below.

The Discharge Stream and Aldermaston Park Lake

The surface water runoff from the northern part of the Aldermaston site was impounded on site in the North Pond system and released periodically down a small stream that leaves the site and flows through the private woodland of Aldermaston Park before entering the Aldermaston Park Lake. At the time of the survey, the Aldermaston Park private property and associated land were for sale. It was reported that members of the public were not permitted to access the private land and an angling syndicate identified in 2011 that used the land had disbanded. No access was given to members of the survey team at the time of the survey.

Aldermaston Stream to Padworth Mill

From the Aldermaston Park Lake, the Aldermaston Stream flows through private properties located in Aldermaston Village. A resident of one of these properties used the water from the stream to irrigate fruit and vegetables grown in their garden. North of the village, the stream cuts across farmland to join the River Kennet near Padworth Mill. A public footpath and cycleway runs alongside the stream for approximatley 0.6 km with no points of access to the stream. The banks were either fenced off or overgrown with vegetation for most of the stream's length. No public activity was observed along the Aldermaston Stream during the survey.

Padworth Mill to Ufton Bridge

Figure 10. River Kennet near Padworth Bridge

The Aldermaston Stream flows into the River Kennet near Padworth Mill. The River Kennet flows north-east for approximately 2.5 km to Ufton Bridge. At the time of the survey, the river was slow moving. Two angling associations owned the fishing rights to the banks along the River Kennet between Padworth Mill and Padworth Bridge (Figure 1). However, the public footpath was not included in the aquatic survey area as it was at the top of a high bank and was not river washed. The north bank was maintained by one of the local angling associations and was used to access the river to undertake fly fishing. A private car park used by members of the association was located north of Padworth Bridge. Another local angling association owned the fishing rights to the south bank along this stretch of river. Although, the south bank was overgrown and not maintained at the time of the survey, a rough footpath was identified, suggesting that the bank is accessed. A public footpath followed the river on the north bank for approximately 0.4 km from Padworth Mill to Padworth Bridge, where people were observed to be using the footpath for dog walking and walking.

Access to the River Kennet between Padworth Bridge and Ufton Bridge was limited on one bank due to private farmland and overgrown areas. However, the other bank could be accessed south of Padworth Bridge via a private track and footpath which followed the River Kennet for approximately 1.1 km to Ufton Bridge. A large angling association, covering the town and district, owned the fishing rights to the River Kennet and the Kennet and Avon Canal. Signage informed the public that only members of the angling association were permitted to access the private footpath. Angling was not observed along the River Kennet at the time of the survey. Commercially trapping signal crayfish along the River Kennet was identified.

Ufton Bridge to Tyle Mill Lock

Figure 11. Ufton Bridge

Ufton Bridge is located approximately 0.1 km before the confluence of the River Kennet and the Kennet and Avon Canal. The length of river and canal between Ufton Bridge and Tyle Mill Lock could be easily accessed via a tow path for the length of the survey area. The canal banks were mainly grass with areas of mud where the man-made banks had collapsed (Figure 13). The tow path running along these banks was used for activities such as dog walking, walking, cycling and preparing for water activities. However, as the canal water level was controlled it was unlikely to be flooded, except in the most extreme of circumstances. For this reason, activities undertaken exclusively on the tow path were not included in the aquatic survey area. One family was identified swimming at Ufton Bridge (Figure 11) and kayaking and paddleboarding along the canal. The north bank of the Kennet and Avon Canal could be accessed at Ufton Bridge via a public footpath. However, the public footpath followed the canal for a short distance before diverting across farmland. Cattle grazing on farmland bordering the tow path were observed drinking from the canal (Figure 12).

Figure 12. Cattle accessing the Kennet and Avon Canal

A private car park owned by the large angling association was located at Ufton Bridge. The Kennet and Avon Canal was predominantly used by tourists or individuals who were travelling. However, two narrowboats were identified to be used as houseboats and were moored along the canal permanently or for long periods of the year. Paddleboarding lessons and tours were undertaken by instructors along the canal with up to 12 people

taking part each session. Parking was readily available in a public car park located at Tyle Mill Lock.

Figure 13. The Kennet and Avon Canal

Silchester Brook

The Aldermaston site discharges liquid wastes to the Silchester brook via the Silchester Sewage Treatment Works. The Silchester Brook flows south approximately 0.5 km towards its confluence with the West End Brook, at which point it is referred to as the Foudry Brook. At the time of the survey there had been a long period of hot and dry weather and the West End Brook had completely dried up. The length of the Silchester Brook was largely overgrown and it is unlikely members of the public would be able to access any location along the brook within the aquatic survey area. No individuals were observed spending time along the brook during the survey.

Burghfield Brook

Figure 14. Burghfield Brook

The Burghfield site is permitted to discharge it's liquid waste to the Burghfield Brook via an onsite sewage treatment works. The liquid discharges are transported to the onsite sewage treatment works which subsequently discharges effluent to the Burghfield Brook (Figure 14). The brook initially flows east and then north-east through farmland to its confluence with the Foudry Brook. At the time of the survey, the Burghfield Brook had a low flow rate and was inaccessible throughout the survey area. A public footpath intersects the farmland and crosses the brook, however, the footpath was overgrown at the time of the survey and it is unlikely that members of the public were accessing the brook.

6.2. Commercial fisheries

One commercial fishery was identified which was trapping signal crayfish along the River Kennet in the aquatic survey area. The catch was processed and distributed to London for human consumption. In 2011, live signal crayfish were being trapped to be exported internationally. However, due to The Invasive Alien Species (Enforcement and Permitting) Order 2019, live signal crayfish can only be distributed nationwide. It was reported that there was an increase in signal crayfish in recent years with approximately 1.5 tonnes of

signal crayfish being trapped and sold in 2022. The signal crayfish are processed and distributed to London, where it is used for educational and culinary uses.

6.3. Angling

Angling was undertaken throughout the northern part of survey area along the River Kennet and the Kennet and Avon Canal. Three angling associations had fishing rights within this area. The largest of the three had approximately 1500 members. However, due to the angling association's fishing rights covering over 25 km of waterways across Reading Town, only a small percentage of the members were estimated to routinely undertake angling in the aquatic survey area. Their fishing rights covered the River Kennet and the Kennet and Avon Canal.

The two smaller angling associations owned the fishing rights to a small stretch of the River Kennet from Padworth Bridge to Padworth Mill. One owned the fishing rights to the north bank and the other owned the fishing rights to the south bank. The north bank was well maintained and had a private carpark which could be used by the members. A member reported that fly fishing was the main angling method used by members along this stretch of river. The south bank was less accessible and the angling locations were overgrown at the time of the survey. The angling association with rights to the south bank could not be contacted at the time of the survey. The two angling associations had a combined membership of approximately 800 anglers.

Access to the banks of the River Kennet and the Kennet and Avon Canal was mostly good throughout the survey area. Angling along the River Kennet was primarily undertaken between Padworth Mill and Padworth Bridge. This stretch of river was maintained by members of the angling association who ensured the river could be accessed for fly fishing. A public footpath running along the canal provided easy access to the Kennet and Avon Canal throughout the survey area. A local angling shop reported that angling along the River Kennet and Kennet and Avon Canal had decreased in popularity with anglers due to the presence of otters, cormorants and signal crayfish.

All angling clubs operated a strict catch and release policy, so consumption of fish from the aquatic survey area was not identified.

6.4. Sewage treatment works

Activities at the sewage treatment works were investigated because liquid waste from the Aldermaston site was discharged via the sewerage system where it was combined with other waste before entering the sewage treatment works.

During the sewage treatment process, solid matter settles out in tanks to form sludge. Following treatment, the liquid component is discharged via an outfall to the Silchester

Brook (National Grid Reference: SU 622 611) and the dried sludge is transported by road to the Basingstoke, Newbury or Reading Treatment Works. The transported sludge is mixed with sludge from other areas of the county and further processed, before being distributed nationally to farms for use as field dressing. However, no farms in the terrestrial survey area were identified to be using sewage sludge as fertisliser on their land.

Employees at the sewage treatment works were identified spending time in close proximity (<10 metres) to the liquid sewage sludge and dried sewage sludge. Activites undertaken in close proximity to the sewage sludge included maintaining pumps, relocation of dried sewage sludge and cleaning filters and grit traps. Occupancy rates for these employees are presented in Section 6.9 and Table 25.

6.5. Food consumption data

The consumption of aquatic foods from the aquatic survey area was not identified at the time of the survey. However, trapping of signal crayfish commercially along the River Kennet was identified. It was reported that there was an increase in signal crayfish in recent years with approximately 1.5 tonnes of signal crayfish being trapped and sold in 2022. The signal crayfish are processed and distrubuted to London for educational and culinary uses. In 2011, it was reported that members of various communities were fishing for and consuming coarse fish from the River Kennet and the Kennet and Avon Canal. It could not be confirmed if this was still taking place in 2022, therefore, it is suggested that a consumption rate of 1 kg y^{-1} for coarse fish be considered for use in radiological dose assessments (Annex 4).

6.6. Occupancy over river washed substrates

Occupancy rates over river washed areas for adults are presented in Table 19. Occupancy rates over river washed substrates for children and infants were not identified. 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' occupancy rates over river washed substrates

Table 2 presents a summary of the adults' occupancy rates over river washed substrates 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 2. Summary of adult's occupancy rates over river washed substrates

River washed 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})	Observed 97.5th percentile (h y^{-1})
Grass	7	7	35	35	35
Mud	1	1	1620	1620	Not Applicable

6.7. Gamma dose rate measurements

Gamma dose rate measurements were taken over three river washed substrates. All measurements were taken at a height of 1 metre above the substrate. The results are presented in Table 20 and are summarised in Table 3.

Table 3. Summary of gamma dose rate measurements taken over river washed 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})
Grass	2	0.057	0.069
Mud	1	0.057	0.057
Mud and stones	1	0.056	0.056

Notes

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

For comparison, natural background rates across the UK 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, 2022).

6.8. 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 river washed 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 were not collected for this pathway.

Handling rates of fishing gear for adults are presented in Table 21. No adults, children or infants were identified handling sediment. No children or infants were identified handling fishing gear.

Adults' handling rates of fishing gear

Table 7 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 4. Summary of adults' handling rates

Handling activity	Number of observations	Number of people in the high-rate group	Maximum gamma of the high-rate group (h y^{-1})	Mean of the high-rate group (h y^{-1})	Observed 97.5th percentile (h y^{-1})
Fishing gear	1	1	1437	1437	Not applicable

The handling of crayfish traps along the River Kennet was the only activity identified where handling fishing gear was involved.

6.9. Exposure to liquid sewage and dried sewage sludge

Activities at the sewage treatment works were investigated because liquid waste from the Aldermaston site is discharged via the sewerage system to the sewage treatment works. The occupancy rates for employees in close proximity (<10 meters) to liquid sewage sludge and dried sewage sludge are presented in Table 25.

Employees undertaking the same activities had occupancy rates of 210 h y^{-1} in close proximity (<10 meters) to liquid sewage sludge and 52 h y^{-1} in close proximity (<10 meters) to dried sewage sludge. The duties included maintaining pumps, moving dried sewage sludge and cleaning filters and grit rag traps.

6.10. Water based 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.

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-based activities have been classified as activities 'on water'.

Adults and children were undertaking a range of activities in water along the River Kennet and the Kennet and Avon Canal including kayaking, paddleboarding and swimming. Infants were only identified to be paddleboarding. The highest occupancy rate in water was 57 h y^{-1} for an individual paddleboarding. The activities undertaken on water within the aquatic survey area by adults, included being on a boat, trapping signal crayfish and fly fishing. No children or infants were identified undertaking activities on water at the time of the survey. The highest occupancy rate on water was 6600 h y^{-1} for two individuals spending time on a narrowboat at Tyle Mill Lock.

7. Terrestrial radiation pathways

7.1. Terrestrial survey area

The terrestrial survey area (Figure 6 and Figure 7) covered the land and watercourses within 5 km of the Aldermaston and Burghfield site centres (National Grid Reference: SU 600 637 and SU 681 680).

The land within 5 km of the Aldermaston site is predominantly agricultural land and woodland. Several villages and a town were located with the terrestrial survey area including Tadley and Silchester to the south, Brimpton to the west and Aldermaston, Woolhampton and Padworth to the north.

The land within 5 km of the Burghfield site is predominantly agricultural land and urban areas. Reading town covered a large area of land to the north and north-east of the Burghfield site. Additionally, there were several small villages located in the survey area, including Mortimer and Beech Hill to the south, Burghfield and Burghfield common to the west, and Three Mile Cross, Spencers Wood and Shinfield to the east. The M4 motorway bisects the northern part of the area.

Interviews were conducted at 18 working farms in the Aldermaston and Burghfield terrestrial survey area. These farms produced the following:

- Arable crops
- Beef cattle
- Lambs

- Cows' milk
- Goats
- Turkeys

The production of beef, milk, lamb, goat, turkey, barley, beans, linseed, rapeseed, oats, and wheat for human consumption was identified in the survey area. Barley, grass (for silage and haylage), maize, rye, spelt, and wheat were grown for animal feed. Farmers and their families were consuming milk and goat meat produced commercially on their own farms. No smallholdings were identified in the survey area.

Interviews were conducted with plot holders at eight allotment sites comprising a total of approximately 400 plots. A wide variety of fruit and vegetables were grown on the allotments and small quantities of produce were grown on a small number of private gardens.

Five beekeepers were identified with a total of 214 hives in the survey area. These hives were located at private properties within the survey area. The average production of honey per hive ranged from 2.1 kg y^{-1} to 13.6 kg y^{-1}. The honey was consumed by the beekeepers, their families and friends and was sold to the public.

Wild foods that were collected from within the survey area and consumed included blackberries, garlic, plums, mushroom and sloes. Game shooting was identified taking place on farmland within the terrestrial survey area. Pheasant, partridge, pigeon and venison were shot and consumed by the farming families and residents. The consumption of freshwater fish was not identified in the terrestrial survey area. The human consumption of groundwater was identified at a small number of farms which used borehole water for their drinking water. Livestock were consuming mains water, borehole water and had access to streams for drinking water.

7.2. Destination of food originating from the terrestrial survey area

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

- Beef cattle were sold to abattoirs and livestock markets which distributed the produce to national supermarkets.
- Beef stores were sold to local farms and to a local butcher located outside the terrestrial survey area.
- Lambs were sold to an abattoir and at livestock markets.
- Milk was sold to several dairies.
- Goat meat was sold at a livestock market.

- Linseed was sold to a grain merchant.
- Rapeseed oil was sold for crushing and distributed nationally.
- Wheat was milled for national distribution.
- Barley was distributed and used as malting barley.
- Beans were distributed nationally.
- Animal feed including barley, grass (for silage and haylage), maize and wheat, were used for the farm's own livestock or sold to farms outside the survey area.

7.3. The potential transfer of contamination off-site by wildlife

The potential transfer of contamination off-site by wildlife was investigated since radionuclides could enter the food chain or contaminate the environment through this pathway. In line with their sustainability policy, the sites did not undertake any routine wildlife controls, since the buildings are enclosed, and it is highly unlikely that wildlife could enter controlled areas.

7.4. Food consumption data

Consumption data for locally produced foodstuffs potentially affected by deposition of gaseous discharges are presented from Table 26 to Table 38 for adults and Table 39 to Table 55 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 5.4 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 56.

Adults' consumption rates

Consumption of locally produced foods was identified in the following 13 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; poultry; eggs; wild/free foods; honey; wild fungi; venison; goat meat. No consumption was identified in the following food groups: cattle meat, pig meat, sheep meat, freshwater fish and freshwater crayfish.

Table 5 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 5. 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	Observed minimum for the high-rate group	Observed mean for the high-rate group (kg y^{-1} or l y^{-1})	Observed 97.5th percentile (kg y^{-1} or l y^{-1})	Generic mean * (kg y^{-1} or l y^{-1})	Generic 97.5th percentile* (kg y^{-1} or l y^{-1})
Green vegetables	110	35	40.8	13.7	21.6	34.8	15.0	45.0
Other vegetables	115	10	79.7	28.8	49.4	65.6	20.0	50.0
Root vegetables	111	14	45.8	15.3	29.5	35.6	10.0	40.0
Potato	96	13	60.6	22.2	29.6	33.6	50.0	120.0
Domestic fruit	110	13	38.9	17.6	25.2	28.9	20.0	75.0
Milk	9	9	208.6	91.3	130.2	205.8	95.0	240.0
Poultry	12	11	2.1	0.9	1.1	1.9	10.0	30.0
Eggs	38	27	29.7	9.9	16.1	29.7	8.5	25.0
Wild/free foods	42	4	10.0	6.0	8.0	9.9	7.0	25.0
Honey	24	2	23.7	23.7	23.7	23.7	2.5	9.5
Wild fungi	3	2	2.5	2.5	2.5	2.5	3.0	10.0
Venison	6	6	0.3	0.3	0.3	0.3	Not determined	Not determined
Goat meat	6	6	6.7	6.7	6.7	6.7	Not determined	Not determined

Notes

*Generic rates based on data from Byrom and others, 1995.

The observed mean consumption rate for the high-rate group was greater than the generic 97.5th percentile consumption rate for honey. Eight of the mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for green vegetables, other vegetables, root vegetables, domestic fruit, milk, eggs, wild/free foods and honey. Three of the observed 97.5th percentile consumption rates exceeded the generic 97.5th percentile consumption rates, which were for other vegetables, eggs and honey.

Children's and infants' consumption rates

Nineteen individuals in the child age group and 12 individuals in the infant age group were identified consuming foods from the terrestrial survey area.

Table 6 presents a summary of children's consumption rates and Table 7 presents a summary of infants' consumption rates. The tables include the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. No generic data have been determined for the child and infant group. In the child age group, no consumption of foods from the following food groups was identified: cattle meat; pig meat; sheep meat; rabbits/hares; wild fungi; venison; freshwater fish; freshwater plants. In the infant age group, no consumption of foods from the following food groups was identified: milk; cattle meat; pig meat; sheep meat; poultry; rabbits/hares; honey; wild fungi; venison; goat meat freshwater fish; freshwater crustaceans.

Table 6. Summary of children's consumption rates of foods from the terrestrial survey area (Age range: 6-year-old to 15-year-old)

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 97.5th percentile (kg y^{-1})
Green vegetables	7	2	18.4	18.4	18.4	18.4
Other vegetables	8	7	17.9	6.3	14.5	17.5
Root vegetables	7	6	8.6	7.4	8.1	8.6
Potato	7	1	11.9	11.9	11.9	10.6
Domestic fruit	10	5	21.7	10.5	17.5	21.7
Milk	4	4	194.7	91.3	147.1	191.8
Poultry	2	2	1.1	1.1	1.1	1.1
Eggs	6	3	17.8	11.8	13.8	17.1
Wild/free foods	3	2	0.7	0.7	0.7	0.7
Honey	2	1	1.0	1.0	1.0	1.0

Table 7. Summary of infants' consumption rates of foods from the terrestrial survey area (Age range: 0 to 5-year-old)

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 97.5th percentile (kg y^{-1})
Green vegetables	7	2	9.2	8.9	9.1	9.2
Other vegetables	8	3	7.7	4.8	6.4	7.5
Root vegetables	8	4	3.8	1.4	2.6	3.8
Potato	5	4	1.5	1.0	1.2	1.4
Domestic fruit	11	1	9.5	9.5	9.5	7.7
Eggs	2	1	5.9	5.9	5.9	5.8
Wild/free foods	5	2	0.3	0.2	0.2	0.3

8. Direct radiation pathways

8.1. Direct radiation survey area

The direct radiation survey area (Figure 8 and Figure 9) covered the land and watercourses within 1 km of the Aldermaston and Burghfield nuclear licensed site boundaries. 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 Aldermaston and Burghfield nuclear licensed site boundaries. 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 land within 1 km of the Aldermaston site is predominantly agricultural land and woodland. The residential areas are mainly located south of the site, across all zones of the survey area, with a small proportion of residential properties located to the north of the site in the >0.5 – 1.0 km zone. A new residential estate has been built within the direct radiation survey area. Two schools and a day care centre were all located within the >0.5 – 1.0 km zone. Three business parks, located to the west, south-west and east of the site, were the main locations for commercial activities. Small commercial properties were located in Tadley including a supermarket, charity shops and restaurants. A country park was located west of the site and was reported to be used by members of the public to undertake activities such as walking and coarse fishing.

The land within the direct radiation survey area at the Burghfield site is predominantly agricultural land. Small areas of residential properties were located to the south and west of the nuclear site. The non-licensed part of the Burghfield site covers a large portion of the direct radiation survey area. Farmland was located within the direct radiation survey area. One day care centre was located within the >0.5 – 1.0 km zone. Commercial activities were limited in the survey area due to the site being rural. Two hotels and two public houses were located within the >0.5 – 1.0 km zone. A sports and social club was located on the non-licensed site boundary south-east of the nuclear licensed site.

8.2. Residential activities

A total of 40 interviews were conducted at residences within the direct radiation survey area across all three zones.

Residential properties within 1 km of the Aldermaston nuclear licensed site boundary were mainly located in the Tadley and Heath End to the south. A small number of properties were located in Aldermaston Village to the north of the site. Interviews were conducted in all three zones at 18 residences, eight of which were within the 0 – 0.25 km zone, two were in the >0.25 – 0.5 km zone and eight were in the >0.5 – 1.0 km zone.

Residential properties within 1 km of the Burghfield nuclear licensed site boundary were located throughout the area. Interviews were conducted in all three zones at 22 residences, two of which were within the 0 – 0.25 km zone, 18 were in the >0.25 – 0.5 km zone and two were in the >0.5 – 1.0 km zone.

8.3. Leisure activities

The main leisure activities undertaken in the survey area were dog walking and walking. A large number of residents walked their dogs in the area, including on the footpaths and fields around the site boundaries. A range of activities were undertaken to the west of the Aldermaston site including angling and walking at a country park, playing rugby, bowls and football at various sports clubs, racing at a 4x4 racing track and an off-road motor sports track. A few play parks were also scattered throughout the residential areas in the survey area. Activities undertaken around the Burghfield site were limited due to the site being rural and the non-licensed AWE site occupying a large portion of the survey area. However, a bowls club was located south-west of the site.

8.4. Commercial activities

The direct radiation survey area included several commercial areas, with the main hub of activity being the three business parks located in the >0.25 – 0.5 km zone at the Aldermaston site. The units included offices and engineering companies. In addition to the

business parks, there were a variety of commercial properties located throughout the survey area, including a large supermarket, restaurants, public houses and charity shops south of the Aldermaston site. A limited number of commercial activities were undertaken within 1 km of the Burghfield nuclear licensed site boundary including a small industrial estate, two public houses and two hotels. Farmland was located within 1 km of the Burghfield nuclear licensed site boundary. No working farms were identified within 1 km of the Aldermaston nuclear licensed site boundary.

Interviews were conducted at 13 businesses, two were located in the 0 – 0.25 km zones, three was located in the >0.25 – 0.5 km zones and eight were located in the >0.5 – 1.0 km zones. The number of employees at these businesses ranged from two to 24.

8.5. Occupancy rates

Table 57 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 58. A summary of occupancy rates in the direct radiation survey area is presented in Table 8. Where generic data for groups of people were collected, for example employees of businesses, only representative examples have been included in the presented data.

Table 8. 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	41	8536	2891	8708
>0.25 - 0.5 km	30	8147	1454	8347
>0.5 - 1.0 km	154	8553	1736	8736

0 - 0.25 km from the nuclear licensed site boundary

Occupancy data for 41 individuals in the 0 - 0.25 km zones were included in the analysis. The observations were for 24 residents and 17 employees. The highest indoor, outdoor and total occupancy rates were for residents who worked within the survey area.

>0.25 - 0.5 km from the nuclear licensed site boundary

Occupancy data for 30 individuals in the >0.25 - 0.5 km zones were included in the analysis. The observations were for 10 residents and 20 employees. The highest indoor, outdoor and total occupancy rates were for residents.

>0.5 - 1.0 km from the nuclear licensed site boundary

Occupancy data for 154 people in the >0.5 - 1.0 km zones were included in the analysis. The observations were for 70 residents, 70 employees, 13 people horse riding and visitor. The highest indoor, outdoor and total occupancy rates were for residents.

8.6. Gamma dose rate measurements

Gamma dose rates were measured indoors and outdoors at most properties and businesses where interviews were conducted in the Aldermaston and Burghfield 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 multiple Thermo RadEye GX Survey Meters, each 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 59 and are summarised in Table 9.

Table 9. Summary of gamma dose rate measurements taken in the direct radiation survey area

Substrate	Number of measurements taken	Minimum gamma dose rate at 1 metre (μGy h^{-1})	Maximum gamma dose rate at 1 metre (μGy h^{-1})
Indoor measurements[a]			
Concrete	29	0.061	0.108
Stone	2	0.068	0.099
Wood	5	0.080	0.106
Outdoor measurements[a]			
Concrete	14	0.063	0.100
Grass	29	0.061	0.091
Stones	6	0.067	0.077
Background measurements[a]			
Grass	6	0.063	0.079

Notes

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

Of the 36 measurements taken indoors at properties, 21 were higher than the maximum background reading, and of the 49 measurements taken outdoors at properties, 12 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 Radiological Response and Emergency Management System (RREMS) programme, which continuously monitors radiation levels at a network of 91 fixed monitors and 100 mobile monitors distributed throughout the UK (www.gov.uk). The nearest RREMS station to Aldermaston and Burghfield was at Odiham, which was approximately 19 km away. The ambient (background) gamma dose rates at Odiham from April to June, which is the most recent data at the time of reporting, ranged from 0.08 μGy h^{-1} to 0.14 μGy h^{-1}. All the

outdoor readings taken during the Aldermaston and Burghfield habits survey were within or below this range.

9. Uses of habits data for dose assessments

9.1. 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, Annex 2 and Annex 3 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 61. Each of the 11 combinations shown in Table 61 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 61 because they have fewer pathways and a dose assessment for them would be adequately covered by one of the 11 listed combinations.

9.2. Prenatal 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 UKHSA (formerly, 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 prenatal children. Therefore, consumption and occupancy data collected during the Aldermaston and Burghfield habits survey for females of childbearing age are presented in Annex 6. 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 6. 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 6 as they might be women of childbearing age.

9.3. ‘Total dose’ assessment

The UK environment agencies and the FSA 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. NDAWG considered this approach to assessing retrospective total doses (Camplin and others, 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 (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2022).

The relevant matrix for the adults’ profiled habits data is shown in Annex 7. Additionally, profiles have been created for the child and infant age groups, and for women of childbearing age. These are shown in Annex 8, Annex 9 and Annex 10 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.

10. Comparisons with the previous survey

The results from this 2022 survey are compared below with results from the last combined habits survey undertaken at Aldermaston and Burghfield in 2011. The aquatic, terrestrial and direct radiation survey areas had changed since the previous Aldermaston and Burghfield habits survey conducted by Cefas in 2011 (Ly and others, 2012). The changes to the terrestrial and direct radiation survey areas were due to an expansion of the Burghfield nuclear licensed site. The Aldermaston site had not changed since 2011. The changes to the aquatic survey area were due to the Burghfield site being permitted to discharge radioactive liquid effluent to the Burghfield Brook.

The comparison of occupancy rates in the direct radiation area is for all age groups combined. All other comparisons are for adults only.

10.1. Aquatic survey area

Activities identified in the aquatic survey area in 2022 differed to those identified in 2011. In 2011, angling was the primary activity being undertaken within the aquatic survey area. However, angling was not observed in 2022. It was reported by a local angling shop that the River Kennet and Kennet and Avon canal had decreased in popularity with anglers due to the presence of otters, cormorants and signal crayfish. In 2022, the riverbanks along the River Kennet were maintained by the local angling associations to allow their members to access the river to undertake fly fishing. It was reported that fly fishing was the main angling method used by members along this stretch of river. In 2022, a range of activites were identified to be undertaken in or on water including: paddleboarding, kayaking, swimming, boat dwelling, trapping signal crayfish, fly fishing and being on a boat. However, only boat dwelling was identified in 2011. In both years, commercial crayfish trapping was being undertaken along the River Kennet.

No interviewees were consuming foods from the aquatic survey area in 2011 and 2022. In In 2011, it was reported that members of various communities were fishing for and consuming coarse fish from the River Kennet and the Kennet and Avon Canal. It could not be confirmed if this was still taking place in 2022, therefore, it is suggested that a consumption rate of 1 kg y^{-1} for coarse fish be considered for use in radiological dose assessments (Annex 4). In 2011 and 2022, handling of fishing gear while trapping signal crayfish was identified and handling of sediment was not identified.

In 2011, occupancy over river washed substrates for adults was recorded over grass and mud, sand and stones. In 2022, activities were recorded over grass and mud.

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

- In 2011: angling
- In 2022: riverbank maintenance and trapping crayfish

A comparison between the 2011 and 2022 data for adult occupancy over river washed substrates is shown in Table 10.

Table 10. Comparison between 2011 and 2022 occupancy rates over river washed substrates and handling rates for fishing gear and sediment for adults

	2011			2022		
River washed substrate	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 for the high-rate group
Grass	3	912	664	7	35	35
Mud	Not identified			1	1620	1620
Mud, sand and stones	1	6	6	Not identified		
Handling fishing gear	2	80	80	1	1437	1437

In 2022, compared to 2011, the mean occupancy rate for the adult high-rate group decreased significantly over grass due to the decreased popularity of angling in the area. Occupancy over the substrate mud, sand and stones was not recorded in 2022. In 2022, an individual commercially trapping crayfish was identified extracting the crayfish from the traps on mud along the River Kennet. Occupancy over mud was not identified in 2011.

The mean rates for the adult high-rate groups for handling fishing gear increased significantly in 2022 compared to 2011. The handling rate for sediment was not identified in 2011 and 2022.

In 2022, occupancy rates in close proximity to sewage sludge were categorised into two activities: occupancy in close proximity to liquid sewage sludge and occupancy in close proximity to dried sewage sludge. In 2011, occupancy rates were presented as a single activity: occupancy in close proximity to sewage sludge. The maximum adult occupancy rate decreased from 960 h y^{-1} in 2011, for an employee spending time in close proximity to sewage sludge, to 260 h y^{-1} in 2022, for an employee spending time in close proximity to liquid sewage sludge and dried sewage sludge.

For activities taking place on the water in the aquatic survey area, the maximum adult occupancy rate increased from 5200 h y^{-1} in 2011, for an individual spending time on a boat, to 6600 h y^{-1} in 2022, for two individuals spending time on a narrowboat. Activities taking place in water were identified in 2022, but not in 2011.

10.2. Terrestrial survey area

Activities in the terrestrial survey area in 2022 were broadly similar to those in 2011. Eighteen farms were identified in 2022 and the principal types of farm produce within the area continued to be cows' milk, beef cattle, lambs and arable crops. One farm in 2011 was producing pork but had ceased production in 2022 and no longer farmed the land.

The growing of fruit and vegetables in gardens and on allotment sites, beekeeping, the collection of wild/free foods and organised game shooting were identified in both surveys.

The mean consumption rates for the adult high-rate groups for terrestrial food groups from the 2011 and 2022 surveys are shown in Table 11.

Table 11. Comparison between 2011 and 2022 mean consumption rates (kg y^{-1}or l y^{-1}) for the adult high-rate groups for terrestrial food groups

Food group	2011	2022
Green vegetables	35.9	21.6
Other vegetables	43.5	49.4
Root vegetables	53.8	29.5
Potato	56.4	29.6
Domestic fruit	26.3	25.2
Milk	591.0	130.2
Cattle meat	20.4	Not identified
Sheep meat	44.3	Not identified
Pig meat	12.5	Not identified
Poultry	4.8	1.1
Eggs	123.8	16.1
Wild/free foods	3.9	8.0
Rabbits/hares	5.4	Not identified
Honey	4.0	23.7
Wild fungi	0.7	2.5
Venison	24.0	0.3
Freshwater fish	24.0	Not identified
Freshwater crustaceans	1.7	Not identified
Goat meat	Not identified	6.7

In 2022, compared to 2011, the mean consumption rates for the adult high-rate group increased in the following food groups: other vegetables; wild/free foods; honey; wild fungi. In 2022 the mean consumption rates for the adult high-rate groups decreased in the following food groups: green vegetables; root vegetables; potato; domestic fruit; milk; poultry; eggs; venison. The consumption of cattle meat, sheep meat, pig meat, rabbits/hares, freshwater fish and freshwater crustacean was identified in 2011 but not in 2022. The consumption of goat meat was identified in 2022 but not in 2011. The most significant increase in the consumption rates was for honey, whilst the most significant decreases were for milk, root vegetables and potato. The consumption of partridge, pheasant, pigeon and venison was identified in both years, but the consumption of hare and rabbit was not identified in 2022.

In 2022, an increased number of beekeepers were identified in the terrestrial survey area. The consumption of honey increased in 2022 due the identification of a beekeeper who consumed large quantities of honey. The consumption of pig meat was not identified in

2022 due to the farm no longer being operational. No specific reasons were identified for the other changes in consumption rates.

In both 2011 and 2022, the consumption of groundwater by humans and livestock was identified. Livestock also had some access to streams and a borehole for drinking water.

10.3. Direct radiation survey area

Activities identified in the direct radiation survey area in 2011 and 2022 were similar and included people residing, working, farming and undertaking recreational activities. A comparison between the 2011 and 2022 direct radiation occupancy rates for all age groups combined, by zone, is presented in Table 12.

Table 12. Comparison between 2011 and 2022 direct radiation occupancy rates (h y^{-1}) for all age groups combined

	2011	2022
0 - 0.25 km		
Highest indoor occupancy	7338	8536
Highest outdoor occupancy	2190	2891
Highest total occupancy	8136	8708
>0.25 - 0.5 km		
Highest indoor occupancy	3087	8147
Highest outdoor occupancy	960	1454
Highest total occupancy	3185	8347
>0.5 - 1.0 km		
Highest indoor occupancy	8080	8553
Highest outdoor occupancy	1750	1736
Highest total occupancy	8500	8736

The occupancy rates in the direct radiation survey area were broadly similar in 2011 and 2022 for the 0 – 0.25 km and >0.5 – 1.0 km zones. In 2011 and 2022, the highest indoor, outdoor and total occupancy rates in the 0 – 0.25 km zone were for residents, with the exception of the highest outdoor occupancy rate in 2022 which was for an employee. In both 2011 and 2022, the highest indoor, outdoor, and total occupancy rates in the >0.5 – 1.0 km zone were for residents.

In the >0.25 – 0.5 km zone in 2011, numerous residents were approached for an interview, but all declined. Therefore, the highest indoor, outdoor and total occupancy rates were for people working in the area. In 2022, interviews were conducted at residences, therefore, the highest indoor, outdoor and total occupancy rate were for residents.

Table 13. Comparison between 2011 and 2022 gamma dose rates (μGy h^{-1})

Location	Indoor		Outdoor	
	2011	2022	2011	2022
Residence 1	0.104	Not Recorded	0.079	0.077
Residence 18	0.098	Not Recorded	0.061	0.070
Residence 23	0.061	0.067	0.065	0.082
Residence 26	0.069	0.074	0.065	0.076
Residence 35	0.094	Not Recorded	0.071	0.072
Residence 38	0.078	0.081	0.078	0.073

Notes
These measurements have not been adjusted for background dose rates.
The locations correspond to those in Table 59.

There was no consistent pattern in the difference in the gamma dose rates between 2011 and 2022. Of the indoor readings that could be compared, three were higher in 2022 than in 2011. For the outdoor readings, four were higher in 2022 than in 2011, and two were lower.

11. Main findings

The survey investigated three potential sources of public radiation exposure from the Aldermaston and Burghfield sites, which were:

- Discharges of liquid radioactive waste into waterways
- 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, angling associations, people spending time on river washed substrates, farmers, allotment holders, 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 499 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 4.3. The consumption and occupancy rates in this section are presented to two significant figures.

11.1. Aquatic survey area

The consumption of foods from the aquatic survey area was not identified in 2022. In 2011, it was reported that members of various communities were fishing for and consuming coarse fish from the River Kennet and the Kennet and Avon Canal. It could not be confirmed if this was still taking place in 2022, therefore, it is suggested that a consumption rate of 1 kg y^{-1} for coarse fish be considered for use in radiological dose assessments (Annex 4).

The mean occupancy rate for the adult high-rate group over the river washed substrates were:

- 35 h y^{-1} for grass
- 1600 y^{-1} for mud

The consumption of aquatic foods from the survey area was not identified.

11.2. 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:

- 22 kg y^{-1} for green vegetables
- 49 kg y^{-1} for other vegetables
- 30 kg y^{-1} for root vegetables
- 30 kg y^{-1} for potato
- 25 kg y^{-1} for domestic fruit
- 130 l y^{-1} for milk
- 1.1 kg y^{-1} for poultry
- 16 kg y^{-1} for eggs
- 8.0 kg y^{-1} for wild/free foods
- 24 kg y^{-1} for honey
- 2.5 kg y^{-1} for wild fungi
- 0.3 kg y^{-1} for venison
- 6.7 kg y^{-1} for goat meat

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

The human consumption of borehole water was identified in the 2022 survey. Farms in the survey area supplied their livestock with mains water and borehole water for drinking water, with some access to streams.

11.3. Direct radiation survey area

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

0 - 0.25 km zone

- 8500 h y^{-1} for the indoor occupancy rate
- 2900 h y^{-1} for the outdoor occupancy rate
- 8700 h y^{-1} for the total occupancy rate

>0.25 - 0.5 km zone

- 8100 h y^{-1} for the indoor occupancy rate
- 1500 h y^{-1} for the outdoor occupancy rate
- 8300 h y^{-1} for the total occupancy rate

>0.5 - 1.0 km zone

- 8600 h y^{-1} for the indoor occupancy rate
- 1700 h y^{-1} for the outdoor occupancy rate
- 8700 h y^{-1} for the total occupancy rate

The highest indoor, outdoor and total occupancy rates were for residents in all zones, with the exception of a farm worker tending livestock in the 0 – 0.25 km zone.

12. 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 significant amounts of time.

In England and Wales, the monitoring programme for radioactivity in food is undertaken by the FSA, and the monitoring programme for radioactivity in the environment is conducted by the EA. The results of these programmes are published annually in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2022).

In 2013 the FSA 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.

12.1. Summary of the monitoring programmes for Aldermaston and Burghfield

The 2021 monitoring programmes relevant to the Aldermaston and Burghfield area included the samples and measurements listed in Table 14 and Table 15. The location names, foods and substrate classifications are taken directly from RIFE 27 (EA, FSA, FSS, NRW, NIEA and SEPA, 2022). Some of the samples and measurements taken for the monitoring programmes may be from outside the survey areas used for the 2022 Aldermaston and Burghfield habits survey.

Table 14. Aquatic food and environmental samples used in the RIFE 27 monitoring programme

Sample	Location
Flounder	Woolwich Reach
Signal crayfish	Ufton Bridge - Theale
Sediment	Pangbourne
Sediment	Mapledurham
Sediment	Aldermaston
Sediment	Spring Lane
Sediment	Stream draining south
Sediment	Near Chamber 39 of PPL
Sediment	Oval pond near Chamber 14
Sediment	River Kennet
Gully pot sediment	Aldermaston Gate
Gully pot sediment	Falcon Gate
Gully pot sediment	Burghfield Gate
Freshwater	Pangbourne
Freshwater	Mapledurham
Freshwater	Aldermaston
Freshwater	Spring Lane
Freshwater	Stream draining south
Freshwater	Near Chamber 39 of PPL
Freshwater	Oval pond near Chamber 14
Freshwater	River Kennet
Freshwater	Hosehill Lake

Table 15. Terrestrial samples used in the RIFE 27 monitoring programme

Food group or Environmental sample
Milk
Potato
Wheat
Grass and herbage
Soil

12.2. Information from the 2022 Aldermaston and Burghfield habits survey for use in the selection of samples and measurements for monitoring programmes

Food Standards Agency monitoring

The following foods presented in Table 16 were either consumed in the largest quantities in their food groups or were the only food in their food group and could be considered for potentially selecting samples for the FSA monitoring programme.

Table 16. Foods considered for potentially selecting samples for the FSA monitoring programme

Food	Food Group
Cabbage	Green vegetables
Tomato	Other vegetables
Carrot	Root vegetables
Potato	Potato
Apple	Domestic fruit
Cows' milk	Milk
Pheasant	Poultry
Chicken egg	Egg
Blackberry	Wild/free foods
Honey	Honey
Mushroom	Wild fungi
Venison	Venison
Goat	Goat meat

Environment Agency monitoring

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

13. Acknowledgements

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Table 17. 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 Aldermaston and Burghfield 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)	70100[a]	143[b]	0.20%	The survey targeted individuals who were potentially the most exposed, mostly producers of local foods such as farmers and allotment holders.
	Number of people resident in the direct radiation survey area (See (C) Direct radiation pathways)	3300	104[b]	3.0%	Interviews were conducted with members of the public from 40 residences out of an estimated total of 1300 permanent residences.
	Number of people working, visiting and undertaking recreational activities in the direct radiation survey area (See (C) Direct radiation pathways)	U	121[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 affected by liquid discharges (excluding those assigned to other categories above) (See (A) Aquatic pathways)	U	31[b]	U	Where generalised data for groups of people were obtained, for example members of angling clubs, only a limited number of representative individuals have been included.
	Total for aquatic, terrestrial and direct radiation survey areas	U	399[b]	U	

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(A) **Aquatic pathways**					
People using the river washed areas (examples include dog walkers, people playing)	Number of people undertaking activities on the river washed areas in the aquatic survey area	U	8	U	
People undertaking activities in or on water (examples include swimming, rowing and kayaking)	Number of people undertaking activities in or on water in the aquatic survey area	U	20	U	Where generalised data for groups of people were obtained, for example members of angling clubs, only a limited number of representative individuals have been included.
Fish and shellfish consumers (from waters subject to liquid discharges)	Number of people consuming fish and/or crustaceans from the aquatic survey area	U	0	U	In 2011, there were unconfirmed reports that coarse fish from the aquatic survey area were being caught and consumed. A suggested consumption rate of 1 kg y^{-1} for coarse fish is presented in Annex 4.

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(B) **Terrestrial pathways**					
Farmers	Number of farmers, smallholders and their family members consuming food from the terrestrial survey area	U	34	U	Interviews were conducted at 18 farms out of an estimated 30 farms in the terrestrial survey area. Nine of the farms interviewed were not consuming any food from the terrestrial survey area.
Allotment holders and gardeners	Number of allotment holders, gardeners and their family members consuming food from the terrestrial survey area	U	153	U	
Honey consumers	Number of people consuming honey produced in the survey area	U	22	U	Five beekeepers were identified who kept hives in the survey area.
(C) **Direct radiation pathways**					
Residents	Number of residents in the survey area	3300	104	3.0%	Interviews were conducted with members of the public from 40 residences out of an estimated total of 1300 permanent residences.

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(C) **Direct radiation pathways**					
Employees	Number of people working in the survey area	U	107	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	14	U	
Breakdown of age groups for people resident in the 5 km terrestrial survey area					
Adult	16-year-old and over	59000[a]	330	0.56%	
Child	6-year-old to 15-year-old	9700[a]	24	0.25%	
Infant	0 to 5-year-old	4700[a]	14	0.30%	

Table 18. Typical food groups used in habits surveys

Food group	Examples of foods within the group
Green vegetables	Asparagus, broccoli, Brussels sprouts, cabbage, calabrese, cauliflower, chard, courgette, cucumber, gherkin, globe artichoke, herbs, kale, leaf beet, lettuce, marrow, spinach
Other vegetables	Aubergine, broad bean, chili pepper, French bean, kohl rabi, 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

Food group	Examples of foods within the group
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, Nephrops, 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 due to their mobility and physiology.

Table 19. Adults' occupancy rates over river washed substrates in the Aldermaston and Burghfield aquatic survey area (h y^{-1})

Person ID number	Location	Activity	Grass	Mud
3490/1/1	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/1	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/2	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/3	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/4	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/5	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3490/2/6	**Padworth Mill**	**Riverbank maintenance**	**35**	**-**
3654/1/1	**River Kennet**	**Commercial fishing**	**-**	**1620**

Notes

Emboldened observations are the high-rate consumers

The mean occupancy rate over grass for adults based on 7 high-rate observations is 35 h y^{-1}

The observed 97.5th percentile rate based on 7 observations is 35 h y^{-1}

The mean occupancy rate over mud for adults based on 1 high-rate observation is 1620 h y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Table 20. Gamma dose rate measurements over river washed substrates in the Aldermaston and Burghfield aquatic survey area (µGy h^{-1})

Location	National Grid Reference	Substrate	Gamma dose rate at 1 metre[a]
Ufton Bridge	SU 619 687	Mud and stones	0.056
South-west of Padworth Bridge	SU 610 669	Grass	0.057
Padworth Bridge to Padworth Mill	SU 610 667	Mud	0.057
Silchester Brook	SU 624 607	Grass	0.069

Notes

[a] These measurements have not been adjusted for background dose rates

Table 21. Adults' handling rates of fishing gear in the Aldermaston and Burghfield aquatic survey area (h y^{-1})

Person ID number	Location	Activity	Fishing gear
3654/1/1	**River Kennet**	**Commercial fishing**	**1437**

Notes

The emboldened observation is the high-rate individual

The mean handling rate of sediments for adults based on 1 high-rate observations is 1437 h y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Table 22. Adults' occupancy rates in and on water in the Aldermaston and Burghfield aquatic survey area (h y^{-1})

Person ID number	Location	Activity	In water	On water
3491/1/1	Ufton Bridge and Tyle Mill Lock	Paddleboarding	57	-
3507/3/1	Ufton Bridge	Kayaking and swimming	36	-
3507/4/1	Ufton Bridge	Kayaking and swimming	36	-
3507/1/1	Ufton Bridge	Kayaking and paddleboarding	24	-
3507/2/1	Ufton Bridge	Kayaking and paddleboarding	24	-
3508/1/1	Ufton Bridge and Tyle Mill Lock	Paddleboarding	9	-
3508/2/1	Ufton Bridge and Tyle Mill Lock	Paddleboarding	9	-
3499/1/1	Tyle Mill Lock	Paddleboarding	6	-
3499/2/1	Tyle Mill Lock	Paddleboarding	6	-
3415/1/1	Tyle Mill Lock	Being on a boat	-	6560
3415/2/1	Tyle Mill Lock	Being on a boat	-	6560
3645/1/1	River Kennet	Commercial fishing	-	966
3467/3/1	Ufton Bridge	Being on a boat	-	230
3467/1/1	Ufton Bridge	Being on a boat	-	210
3467/2/1	Ufton Bridge	Being on a boat	-	210
3490/1/1	Padworth Mill	Fly fishing	-	110

Table 23. Children's occupancy rates 'in water' in the Aldermaston and Burghfield aquatic survey area (h y^{-1})

Person ID number	Age	Location	Activity	In water
3491/2/1	7	Ufton Bridge and Tyle Mill Lock	Paddleboarding	57
3507/5/1	7	Ufton Bridge	Kayaking and swimming	36
3507/6/1	9	Ufton Bridge	Kayaking and swimming	36

Table 24. Infants' occupancy rates 'in water' in the Aldermaston and Burghfield aquatic survey area (h y^{-1})

Person ID number	Age	Location	Activity	In water
3491/3/1	3	Ufton Bridge and Tyle Mill Lock	Paddleboarding	57

Table 25. Adults occupancy rates in close proximity to liquid sewage sludge and dried sewage sludge (h y^{-1})

Observation number	Activity	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge
3413/1/1	Maintaining pumps, moving dried sewage sludge, and cleaning filters and grit rag traps	208	52
3413/1/2	Maintaining pumps, moving dried sewage sludge, and cleaning filters and grit rag traps	208	52
3413/1/3	Maintaining pumps, moving dried sewage sludge, and cleaning filters and grit rag traps	208	52
3413/1/4	Maintaining pumps, moving dried sewage sludge, and cleaning filters and grit rag traps	208	52
3413/1/5	Maintaining pumps, moving dried sewage sludge, and cleaning filters and grit rag traps	208	52

Table 26. Adults' consumption rates of green vegetables from the Aldermaston Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3646/1/1	-	2.0	-	2.7	-	-	3.2	7.4	25.5	-	-	-	-	40.8
3646/2/1	-	2.0	-	2.7	-	-	3.2	7.4	25.5	-	-	-	-	40.8
3504/1/1	-	-	-	13.7	-	-	-	14.7	8.5	-	-	-	2.2	39.1
3416/1/1	-	-	4.5	-	23.3	-	-	-	-	1.8	1.6	-	1.9	33.2
3416/2/1	-	-	4.5	-	23.3	-	-	-	-	1.8	1.6	-	1.9	33.2
3416/3/1	-	-	4.5	-	23.3	-	-	-	-	1.8	1.6	-	1.9	33.2
3379/1/1	-	-	-	-	11.9	-	0.2	3.9	11.9	-	-	-	-	27.9
3379/2/1	-	-	-	-	11.9	-	0.2	3.9	11.9	-	-	-	-	27.9
3435/1/1	3.3	-	-	2.5	3.8	3.1	1.9	-	6.1	4.1	-	-	-	24.7
3435/2/1	3.3	-	-	2.5	3.8	3.1	1.9	-	6.1	4.1	-	-	-	24.7
3406/1/1	-	-	-	-	-	-	-	-	20.4	-	3.2	-	-	23.6
3498/1/1	-	0.9	3.8	1.3	1.6	-	3.6	5.2	-	4.3	-	-	0.5	21.2
3498/2/1	-	0.9	3.8	1.3	1.6	-	3.6	5.2	-	4.3	-	-	0.5	21.2
3462/1/1	-	-	-	-	12.8	-	-	7.4	-	-	-	-	-	20.1
3462/2/1	-	-	-	-	12.8	-	-	7.4	-	-	-	-	-	20.1
3501/1/1	-	-	-	3.1	3.1	2.7	-	5.4	0.8	0.8	-	2.6	-	18.4
3501/2/1	-	-	-	3.1	3.1	2.7	-	5.4	0.8	0.8	-	2.6	-	18.4
3501/3/1	-	-	-	3.1	3.1	2.7	-	5.4	0.8	0.8	-	2.6	-	18.4
3501/4/1	-	-	-	3.1	3.1	2.7	-	5.4	0.8	0.8	-	2.6	-	18.4
3501/8/1	-	-	-	3.1	3.1	2.7	-	5.4	0.8	0.8	-	2.6	-	18.4

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3514/1/1	**-**	**-**	**1.6**	**-**	**-**	**-**	**-**	**-**	**2.2**	**-**	**-**	**14.1**	**-**	**17.9**
3514/2/1	**-**	**-**	**1.6**	**-**	**-**	**-**	**-**	**-**	**2.2**	**-**	**-**	**14.1**	**-**	**17.9**
3400/1/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/1/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/2/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/3/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/4/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/5/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3652/6/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.4**	**8.5**	**-**	**-**	**-**	**-**	**15.9**
3506/1/1	**-**	**-**	**2.0**	**2.3**	**2.6**	**1.2**	**-**	**1.8**	**2.5**	**3.2**	**-**	**-**	**-**	**15.6**
3506/2/1	**-**	**-**	**2.0**	**2.3**	**2.6**	**1.2**	**-**	**1.8**	**2.5**	**3.2**	**-**	**-**	**-**	**15.6**
3465/1/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**14.0**	**-**	**-**	**-**	**-**	**14.0**
3465/2/1	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**14.0**	**-**	**-**	**-**	**-**	**14.0**
3430/1/1	**4.5**	**-**	**-**	**-**	**-**	**-**	**-**	**9.2**	**-**	**-**	**-**	**-**	**-**	**13.7**
3430/2/1	**4.5**	**-**	**-**	**-**	**-**	**-**	**-**	**9.2**	**-**	**-**	**-**	**-**	**-**	**13.7**
3493/1/1	-	-	-	2.7	5.1	-	-	3.7	-	1.4	-	-	-	12.9
3493/2/1	-	-	-	2.7	5.1	-	-	3.7	-	1.4	-	-	-	12.9
3503/1/1	-	-	-	2.7	5.1	-	1.9	3.0	-	-	-	-	-	12.7
3503/2/1	-	-	-	2.7	5.1	-	1.9	3.0	-	-	-	-	-	12.7
3500/1/1	-	-	-	-	-	-	-	3.8	8.5	-	-	-	-	12.3
3500/2/1	-	-	-	-	-	-	-	3.8	8.5	-	-	-	-	12.3
3477/1/1	-	-	-	-	-	-	-	11.0	-	-	-	-	-	11.0

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3373/1/1	-	-	-	5.0	-	-	-	3.7	-	-	2.0	-	-	10.7
3373/2/1	-	-	-	5.0	-	-	-	3.7	-	-	2.0	-	-	10.7
3376/1/1	-	-	3.2	2.0	1.0	-	-	-	-	-	0.4	-	-	6.7
3376/2/1	-	-	3.2	2.0	1.0	-	-	-	-	-	0.4	-	-	6.7
3376/3/1	-	-	3.2	2.0	1.0	-	-	-	-	-	0.4	-	-	6.7
3376/4/1	-	-	3.2	2.0	1.0	-	-	-	-	-	0.4	-	-	6.7
3445/1/1	-	-	-	-	6.4	-	-	-	-	-	-	-	-	6.4
3445/2/1	-	-	-	-	6.4	-	-	-	-	-	-	-	-	6.4
3371/1/1	-	-	1.2	-	4.6	-	-	-	-	-	-	-	-	5.8
3371/2/1	-	-	1.2	-	4.6	-	-	-	-	-	-	-	-	5.8
3371/3/1	-	-	1.2	-	4.6	-	-	-	-	-	-	-	-	5.8
3371/4/1	-	-	1.2	-	4.6	-	-	-	-	-	-	-	-	5.8
3391/1/1	-	-	-	-	-	-	-	-	5.7	-	-	-	-	5.7
3391/2/1	-	-	-	-	-	-	-	-	5.7	-	-	-	-	5.7
3402/1/1	-	-	-	-	-	-	-	5.5	-	-	-	-	-	5.5
3402/2/1	-	-	-	-	-	-	-	5.5	-	-	-	-	-	5.5
3440/1/1	-	-	-	-	-	-	-	5.5	-	-	-	-	-	5.5
3440/2/1	-	-	-	-	-	-	-	5.5	-	-	-	-	-	5.5
3483/1/1	-	-	1.4	-	-	-	-	3.7	-	-	-	-	-	5.0
3483/2/1	-	-	1.4	-	-	-	-	3.7	-	-	-	-	-	5.0
3408/1/1	3.0	1.8	-	-	-	-	-	-	-	-	-	-	-	4.8
3408/2/1	3.0	1.8	-	-	-	-	-	-	-	-	-	-	-	4.8

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3463/1/1	-	-	-	-	1.2	-	-	1.5	0.4	-	-	1.4	-	4.5
3463/2/1	-	-	-	-	1.2	-	-	1.5	0.4	-	-	1.4	-	4.5
3463/3/1	-	-	-	-	1.2	-	-	1.5	0.4	-	-	1.4	-	4.5
3443/1/1	-	-	-	-	-	-	-	1.8	-	-	2.0	-	-	3.8
3443/2/1	-	-	-	-	-	-	-	1.8	-	-	2.0	-	-	3.8
3393/1/1	-	0.5	-	2.4	-	-	-	-	-	-	0.5	-	-	3.5
3393/2/1	-	0.5	-	2.4	-	-	-	-	-	-	0.5	-	-	3.5
3393/3/1	-	0.5	-	2.4	-	-	-	-	-	-	0.5	-	-	3.5
3369/1/1	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/2	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/3	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/4	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/5	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/6	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/7	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/8	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/9	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/10	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/11	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/12	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/13	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/14	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3369/1/15	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/16	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/17	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/18	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/19	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3369/1/20	-	-	-	-	2.1	-	-	-	-	-	1.1	-	-	3.2
3433/1/1	-	-	1.0	0.7	-	-	-	-	0.9	-	0.1	-	-	2.7
3433/2/1	-	-	1.0	0.7	-	-	-	-	0.9	-	0.1	-	-	2.7
3433/3/1	-	-	1.0	0.7	-	-	-	-	0.9	-	0.1	-	-	2.7
3423/1/1	-	-	-	-	2.1	-	-	-	-	-	0.5	-	-	2.6
3423/2/1	-	-	-	-	2.1	-	-	-	-	-	0.5	-	-	2.6
3423/3/1	-	-	-	-	2.1	-	-	-	-	-	0.5	-	-	2.6
3423/4/1	-	-	-	-	2.1	-	-	-	-	-	0.5	-	-	2.6
3513/1/1	-	-	-	-	-	-	-	1.6	-	-	-	-	-	1.6
3513/2/1	-	-	-	-	-	-	-	1.6	-	-	-	-	-	1.6
3509/1/1	-	-	-	-	-	-	-	1.5	-	-	-	-	-	1.5
3509/2/1	-	-	-	-	-	-	-	1.5	-	-	-	-	-	1.5
3418/1/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1
3418/2/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1
3418/3/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1
3418/4/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1
3418/5/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1

Person ID number	Artichoke	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3418/6/1	-	-	-	-	-	-	-	0.7	0.2	-	0.2	-	-	1.1
3498/3/1	-	0.04	0.2	0.1	0.1	-	0.2	0.2	-	0.2	-	-	0.02	0.9

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for adults based on the 35 high-rate consumers is 21.6 kg y^{-1}

The observed 97.5th percentile rate based on 110 observations is 34.8 kg y^{-1}

Table 27. Adults' consumption rates of other vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3646/1/1	-	-	-	-	-	-	-	-	-	-	**10.2**	**7.3**	**6.4**	**55.8**	**79.7**
3646/2/1	-	-	-	-	-	-	-	-	-	-	**10.2**	**7.3**	**6.4**	**55.8**	**79.7**
3406/1/1	-	-	-	-	**4.5**	-	-	**9.2**	-	-	**4.5**	-	-	**55.3**	**73.5**
3477/1/1	-	-	-	-	-	-	-	-	-	-	**10.2**	-	-	**54.0**	**64.2**
3465/1/1	-	-	-	-	**1.9**	-	-	-	-	**6.8**	**1.9**	**5.4**	**2.8**	**21.6**	**40.4**
3465/2/1	-	-	-	-	**1.9**	-	-	-	-	**6.8**	**1.9**	**5.4**	**2.8**	**21.6**	**40.4**
3440/1/1	-	-	-	-	-	-	-	-	-	-	**7.7**	-	-	**21.6**	**29.2**
3440/2/1	-	-	-	-	-	-	-	-	-	-	**7.7**	-	-	**21.6**	**29.2**
3462/1/1	-	-	-	-	-	-	-	**5.4**	-	**9.0**	-	-	-	**14.4**	**28.8**
3462/2/1	-	-	-	-	-	-	-	**5.4**	-	**9.0**	-	-	-	**14.4**	**28.8**
3435/1/1	-	-	-	0.1	0.5	-	-	-	0.4	21.6	-	-	2.1	0.9	25.6
3435/2/1	-	-	-	0.1	0.5	-	-	-	0.4	21.6	-	-	2.1	0.9	25.6
3369/1/1	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/2	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/3	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/4	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/5	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/6	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/7	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/8	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/9	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3369/1/10	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/11	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/12	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/13	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/14	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/15	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/16	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/17	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/18	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/19	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3369/1/20	-	-	-	0.1	-	-	0.6	-	2.0	-	1.0	4.5	0.05	14.4	22.6
3367/1/1	-	10.0	-	-	-	-	-	-	-	-	10.0	-	2.1	-	22.1
3367/2/1	-	10.0	-	-	-	-	-	-	-	-	10.0	-	2.1	-	22.1
3498/1/1	-	-	-	-	2.0	0.2	-	0.4	-	-	5.8	5.1	5.2	3.4	22.1
3498/2/1	-	-	-	-	2.0	0.2	-	0.4	-	-	5.8	5.1	5.2	3.4	22.1
3379/1/1	-	-	-	-	0.3	-	-	0.2	-	8.4	3.6	2.5	2.1	5.0	22.1
3379/2/1	-	-	-	-	0.3	-	-	0.2	-	8.4	3.6	2.5	2.1	5.0	22.1
3445/1/1	-	-	-	-	0.9	-	-	-	-	-	3.1	-	-	18.0	22.0
3445/2/1	-	-	-	-	0.9	-	-	-	-	-	3.1	-	-	18.0	22.0
3513/1/1	-	-	-	-	-	-	-	-	-	-	2.8	1.2	0.9	15.7	20.5
3513/2/1	-	-	-	-	-	-	-	-	-	-	2.8	1.2	0.9	15.7	20.5
3504/1/1	-	0.4	-	-	-	-	-	-	-	-	4.1	-	-	14.4	18.9
3433/1/1	-	1.4	-	-	0.5	-	-	-	1.5	-	2.6	2.3	0.7	9.0	17.9

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3433/2/1	-	1.4	-	-	0.5	-	-	-	1.5	-	2.6	2.3	0.7	9.0	17.9
3433/3/1	-	1.4	-	-	0.5	-	-	-	1.5	-	2.6	2.3	0.7	9.0	17.9
3380/1/1	-	5.6	-	-	-	-	-	-	-	-	11.2	-	-	-	16.8
3501/1/1	-	-	-	0.02	-	-	-	-	-	-	4.5	0.8	1.8	8.2	15.4
3501/2/1	-	-	-	0.02	-	-	-	-	-	-	4.5	0.8	1.8	8.2	15.4
3501/3/1	-	-	-	0.02	-	-	-	-	-	-	4.5	0.8	1.8	8.2	15.4
3501/4/1	-	-	-	0.02	-	-	-	-	-	-	4.5	0.8	1.8	8.2	15.4
3501/8/1	-	-	-	0.02	-	-	-	-	-	-	4.5	0.8	1.8	8.2	15.4
3416/1/1	-	7.5	-	-	-	-	-	-	-	-	4.1	0.6	1.9	-	14.1
3416/2/1	-	7.5	-	-	-	-	-	-	-	-	4.1	0.6	1.9	-	14.1
3416/3/1	-	7.5	-	-	-	-	-	-	-	-	4.1	0.6	1.9	-	14.1
3652/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3652/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3652/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3652/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3652/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3652/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	12.0
3500/1/1	-	1.7	-	-	-	-	-	-	-	-	1.0	-	1.8	7.2	11.7
3500/2/1	-	1.7	-	-	-	-	-	-	-	-	1.0	-	1.8	7.2	11.7
3371/1/1	-	-	-	-	0.7	-	-	1.7	-	-	2.0	-	1.6	4.9	10.7
3371/2/1	-	-	-	-	0.7	-	-	1.7	-	-	2.0	-	1.6	4.9	10.7
3371/3/1	-	-	-	-	0.7	-	-	1.7	-	-	2.0	-	1.6	4.9	10.7
3371/4/1	-	-	-	-	0.7	-	-	1.7	-	-	2.0	-	1.6	4.9	10.7

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3506/1/1	0.5	-	-	-	0.8	0.1	-	-	0.5	-	0.5	5.9	-	1.5	9.7
3506/2/1	0.5	-	-	-	0.8	0.1	-	-	0.5	-	0.5	5.9	-	1.5	9.7
3393/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9.6	9.6
3393/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9.6	9.6
3393/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9.6	9.6
3493/1/1	-	-	-	0.2	-	1.0	-	-	-	-	1.1	-	-	5.4	7.8
3493/2/1	-	-	-	0.2	-	1.0	-	-	-	-	1.1	-	-	5.4	7.8
3419/1/1	-	1.3	-	-	-	-	-	-	-	-	6.4	-	-	-	7.6
3419/2/1	-	1.3	-	-	-	-	-	-	-	-	6.4	-	-	-	7.6
3400/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	7.2
3376/1/1	-	2.0	-	-	0.7	-	-	1.9	-	-	1.6	-	0.9	-	7.2
3376/2/1	-	2.0	-	-	0.7	-	-	1.9	-	-	1.6	-	0.9	-	7.2
3376/3/1	-	2.0	-	-	0.7	-	-	1.9	-	-	1.6	-	0.9	-	7.2
3376/4/1	-	2.0	-	-	0.7	-	-	1.9	-	-	1.6	-	0.9	-	7.2
3463/1/1	-	-	-	-	-	-	-	0.3	-	-	4.8	0.7	0.6	-	6.5
3463/2/1	-	-	-	-	-	-	-	0.3	-	-	4.8	0.7	0.6	-	6.5
3463/3/1	-	-	-	-	-	-	-	0.3	-	-	4.8	0.7	0.6	-	6.5
3391/1/1	-	-	-	-	-	-	-	-	0.3	-	-	-	-	6.0	6.3
3391/2/1	-	-	-	-	-	-	-	-	0.3	-	-	-	-	6.0	6.3
3483/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	5.4
3483/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	5.4
3443/1/1	-	-	-	-	-	-	-	-	-	-	5.1	-	-	-	5.1
3443/2/1	-	-	-	-	-	-	-	-	-	-	5.1	-	-	-	5.1

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3514/1/1	-	-	-	-	-	-	-	0.6	-	-	-	1.6	-	2.9	5.1
3514/2/1	-	-	-	-	-	-	-	0.6	-	-	-	1.6	-	2.9	5.1
3373/1/1	-	1.7	1.5	-	1.8	-	-	-	-	-	-	-	-	-	5.0
3373/2/1	-	1.7	1.5	-	1.8	-	-	-	-	-	-	-	-	-	5.0
3423/1/1	-	1.4	-	-	0.9	-	-	-	-	-	2.6	-	-	-	4.9
3423/2/1	-	1.4	-	-	0.9	-	-	-	-	-	2.6	-	-	-	4.9
3423/3/1	-	1.4	-	-	0.9	-	-	-	-	-	2.6	-	-	-	4.9
3423/4/1	-	1.4	-	-	0.9	-	-	-	-	-	2.6	-	-	-	4.9
3418/1/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3418/2/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3418/3/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3418/4/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3418/5/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3418/6/1	-	-	-	0.03	0.4	-	-	0.4	-	-	-	0.7	-	2.8	4.4
3503/1/1	-	-	-	-	-	-	-	-	-	-	2.6	-	-	0.4	3.0
3503/2/1	-	-	-	-	-	-	-	-	-	-	2.6	-	-	0.4	3.0
3419/5/1	-	0.5	-	-	-	-	-	-	-	-	2.4	-	-	-	2.9
3419/6/1	-	0.5	-	-	-	-	-	-	-	-	2.4	-	-	-	2.9
3419/7/1	-	0.5	-	-	-	-	-	-	-	-	2.4	-	-	-	2.9
3419/8/1	-	0.5	-	-	-	-	-	-	-	-	2.4	-	-	-	2.9
3430/1/1	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	2.5
3430/2/1	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	2.5
3402/1/1	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	1.7

Person ID number	Aubergine	Broad bean	Cannellini	Chilli pepper	French bean	Mangetout	Okra	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
3402/2/1	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	1.7
3498/3/1	-	-	-	-	0.1	0.01	-	0.02	-	-	0.2	0.2	0.2	0.1	0.9

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for adults based on the 10 high-rate consumers is 49.4 kg y^{-1}

The observed 97.5th percentile rate based on 115 observations is 65.6 kg y^{-1}

Table 28. Adults' consumption rates of root vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3406/1/1	**36.9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5.9**	**3.0**	**-**	**-**	**-**	**-**	**-**	**45.8**
3462/1/1	**-**	**33.8**	**-**	**-**	**-**	**3.0**	**-**	**-**	**-**	**8.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**44.8**
3462/2/1	**-**	**33.8**	**-**	**-**	**-**	**3.0**	**-**	**-**	**-**	**8.1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**44.8**
3498/1/1	**6.9**	**6.3**	**2.1**	**-**	**2.4**	**-**	**-**	**-**	**2.9**	**-**	**5.6**	**-**	**-**	**1.2**	**5.1**	**-**	**-**	**32.5**
3498/2/1	**6.9**	**6.3**	**2.1**	**-**	**2.4**	**-**	**-**	**-**	**2.9**	**-**	**5.6**	**-**	**-**	**1.2**	**5.1**	**-**	**-**	**32.5**
3463/1/1	**0.9**	**5.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5.0**	**4.0**	**-**	**-**	**-**	**15.2**	**-**	**-**	**30.1**
3463/2/1	**0.9**	**5.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5.0**	**4.0**	**-**	**-**	**-**	**15.2**	**-**	**-**	**30.1**
3463/3/1	**0.9**	**5.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5.0**	**4.0**	**-**	**-**	**-**	**15.2**	**-**	**-**	**30.1**
3493/1/1	**1.1**	**-**	**2.4**	**-**	**-**	**0.5**	**-**	**-**	**5.0**	**7.0**	**-**	**-**	**-**	**-**	**9.1**	**-**	**-**	**25.1**
3493/2/1	**1.1**	**-**	**2.4**	**-**	**-**	**0.5**	**-**	**-**	**5.0**	**7.0**	**-**	**-**	**-**	**-**	**9.1**	**-**	**-**	**25.1**
3506/1/1	**1.4**	**0.3**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**5.4**	**0.3**	**1.0**	**-**	**0.8**	**10.2**	**-**	**-**	**20.7**
3506/2/1	**1.4**	**0.3**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**5.4**	**0.3**	**1.0**	**-**	**0.8**	**10.2**	**-**	**-**	**20.7**
3435/1/1	**3.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**12.3**	**-**	**-**	**15.3**
3435/2/1	**3.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**12.3**	**-**	**-**	**15.3**
3416/1/1	1.5	9.8	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	-	14.3
3416/2/1	1.5	9.8	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	-	14.3
3416/3/1	1.5	9.8	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	-	14.3
3423/1/1	3.8	0.6	-	-	-	-	-	-	3.8	4.1	-	-	-	-	-	-	-	12.3
3423/2/1	3.8	0.6	-	-	-	-	-	-	3.8	4.1	-	-	-	-	-	-	-	12.3
3423/3/1	3.8	0.6	-	-	-	-	-	-	3.8	4.1	-	-	-	-	-	-	-	12.3
3423/4/1	3.8	0.6	-	-	-	-	-	-	3.8	4.1	-	-	-	-	-	-	-	12.3

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3513/1/1	2.0	5.4	-	-	-	-	-	-	1.0	3.1	-	-	-	-	-	-	-	11.5
3513/2/1	2.0	5.4	-	-	-	-	-	-	1.0	3.1	-	-	-	-	-	-	-	11.5
3504/1/1	-	0.9	-	-	-	-	-	-	10.0	-	-	-	-	-	-	-	-	10.9
3376/1/1	0.6	-	-	-	-	-	-	-	-	-	0.5	-	1.4	-	5.9	-	0.8	9.2
3376/2/1	0.6	-	-	-	-	-	-	-	-	-	0.5	-	1.4	-	5.9	-	0.8	9.2
3376/3/1	0.6	-	-	-	-	-	-	-	-	-	0.5	-	1.4	-	5.9	-	0.8	9.2
3376/4/1	0.6	-	-	-	-	-	-	-	-	-	0.5	-	1.4	-	5.9	-	0.8	9.2
3430/1/1	1.7	-	-	-	-	-	-	-	3.5	3.5	-	-	-	-	-	-	-	8.7
3430/2/1	1.7	-	-	-	-	-	-	-	3.5	3.5	-	-	-	-	-	-	-	8.7
3503/1/1	1.5	5.0	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	7.7
3503/2/1	1.5	5.0	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	7.7
3501/1/1	-	1.2	-	1.2	-	-	-	-	1.3	2.5	1.4	-	-	-	-	-	-	7.6
3501/2/1	-	1.2	-	1.2	-	-	-	-	1.3	2.5	1.4	-	-	-	-	-	-	7.6
3501/3/1	-	1.2	-	1.2	-	-	-	-	1.3	2.5	1.4	-	-	-	-	-	-	7.6
3501/4/1	-	1.2	-	1.2	-	-	-	-	1.3	2.5	1.4	-	-	-	-	-	-	7.6
3501/8/1	-	1.2	-	1.2	-	-	-	-	1.3	2.5	1.4	-	-	-	-	-	-	7.6
3433/1/1	-	0.6	-	2.1	-	-	-	-	2.0	2.2	0.4	0.1	-	-	-	-	-	7.4
3433/2/1	-	0.6	-	2.1	-	-	-	-	2.0	2.2	0.4	0.1	-	-	-	-	-	7.4
3433/3/1	-	0.6	-	2.1	-	-	-	-	2.0	2.2	0.4	0.1	-	-	-	-	-	7.4
3465/1/1	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	-	-	7.3
3465/2/1	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	-	-	7.3
3371/1/1	1.7	1.7	-	-	-	-	-	-	1.7	-	1.3	-	-	-	-	-	-	6.3

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3371/2/1	1.7	1.7	-	-	-	-	-	-	1.7	-	1.3	-	-	-	-	-	-	6.3
3371/3/1	1.7	1.7	-	-	-	-	-	-	1.7	-	1.3	-	-	-	-	-	-	6.3
3371/4/1	1.7	1.7	-	-	-	-	-	-	1.7	-	1.3	-	-	-	-	-	-	6.3
3373/1/1	3.0	1.5	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	6.3
3373/2/1	3.0	1.5	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	6.3
3380/1/1	-	-	-	-	-	0.9	-	-	-	4.4	-	-	-	-	-	-	-	5.3
3646/1/1	-	-	-	-	-	-	1.3	-	-	-	-	-	3.8	-	-	-	-	5.0
3646/2/1	-	-	-	-	-	-	1.3	-	-	-	-	-	3.8	-	-	-	-	5.0
3652/1/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3652/2/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3652/3/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3652/4/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3652/5/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3652/6/1	0.8	0.8	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	3.3
3379/1/1	1.6	0.6	-	-	-	-	-	0.3	0.7	-	-	-	-	-	-	-	-	3.1
3379/2/1	1.6	0.6	-	-	-	-	-	0.3	0.7	-	-	-	-	-	-	-	-	3.1
3445/1/1	-	-	-	-	-	-	-	-	3.0	-	-	-	-	-	-	-	-	3.0
3445/2/1	-	-	-	-	-	-	-	-	3.0	-	-	-	-	-	-	-	-	3.0
3369/1/1	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/2	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/3	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/4	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3369/1/5	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/6	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/7	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/8	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/9	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/10	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/11	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/12	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/13	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/14	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/15	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/16	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/17	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/18	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/19	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3369/1/20	0.5	-	-	0.1	-	-	-	-	0.3	0.4	-	-	-	-	-	1.5	-	2.8
3419/1/1	0.5	0.5	-	-	-	-	-	-	0.8	0.2	-	-	0.2	-	-	-	-	2.2
3419/2/1	0.5	0.5	-	-	-	-	-	-	0.8	0.2	-	-	0.2	-	-	-	-	2.2
3367/1/1	-	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1
3367/2/1	-	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1
3498/3/1	0.3	0.3	0.1	-	0.1	-	-	-	0.1	-	0.2	-	-	0.1	0.2	-	-	1.4
3476/1/1	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	1.3

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3476/2/1	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	1.3
3476/3/1	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	1.3
3476/6/1	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	1.3
3500/1/1	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	1.2
3500/2/1	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	1.2
3443/1/1	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	1.1
3443/2/1	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	1.1
3514/1/1	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0
3514/2/1	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0
3408/1/1	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8
3408/2/1	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8
3419/5/1	0.2	0.2	-	-	-	-	-	-	0.3	0.1	-	-	0.1	-	-	-	-	0.8
3419/6/1	0.2	0.2	-	-	-	-	-	-	0.3	0.1	-	-	0.1	-	-	-	-	0.8
3419/7/1	0.2	0.2	-	-	-	-	-	-	0.3	0.1	-	-	0.1	-	-	-	-	0.8
3419/8/1	0.2	0.2	-	-	-	-	-	-	0.3	0.1	-	-	0.1	-	-	-	-	0.8
3418/1/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3418/2/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3418/3/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3418/4/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3418/5/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3418/6/1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
3393/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.04

Person ID number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Horseradish	Kohl rabi	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Sweet potato	Turnip	Total
3393/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.04
3393/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.04

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for adults based on the 14 high-rate consumers is 29.5 kg y^{-1}

The observed 97.5th percentile rate based on 111 observations is 35.6 kg y^{-1}

Table 29. Adults' consumption rates of potato from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Potato
3380/1/1	**60.6**
3371/1/1	**33.6**
3371/2/1	**33.6**
3371/3/1	**33.6**
3371/4/1	**33.6**
3493/1/1	**25.2**
3493/2/1	**25.2**
3373/1/1	**23.8**
3373/2/1	**23.8**
3498/1/1	**23.5**
3498/2/1	**23.5**
3646/1/1	**22.2**
3646/2/1	**22.2**
3367/1/1	20.0
3367/2/1	20.0
3652/1/1	16.7
3652/2/1	16.7
3652/3/1	16.7
3652/4/1	16.7
3652/5/1	16.7
3652/6/1	16.7
3433/1/1	11.9
3433/2/1	11.9
3433/3/1	11.9
3500/1/1	11.3
3500/2/1	11.3
3379/1/1	10.5
3379/2/1	10.5
3443/1/1	10.1
3443/2/1	10.1
3504/1/1	10.1
3418/1/1	9.8
3418/2/1	9.8
3418/3/1	9.8
3418/4/1	9.8
3418/5/1	9.8
3418/6/1	9.8
3506/1/1	7.5

Person ID number	Potato
3506/2/1	7.5
3463/1/1	7.0
3463/2/1	7.0
3463/3/1	7.0
3419/1/1	6.3
3419/2/1	6.3
3445/1/1	5.0
3445/2/1	5.0
3423/1/1	5.0
3423/2/1	5.0
3423/3/1	5.0
3423/4/1	5.0
3462/1/1	5.0
3462/2/1	5.0
3369/1/1	4.8
3369/1/2	4.8
3369/1/3	4.8
3369/1/4	4.8
3369/1/5	4.8
3369/1/6	4.8
3369/1/7	4.8
3369/1/8	4.8
3369/1/9	4.8
3369/1/10	4.8
3369/1/11	4.8
3369/1/12	4.8
3369/1/13	4.8
3369/1/14	4.8
3369/1/15	4.8
3369/1/16	4.8
3369/1/17	4.8
3369/1/18	4.8
3369/1/19	4.8
3369/1/20	4.8
3513/1/1	4.4
3513/2/1	4.4
3376/1/1	3.9
3376/2/1	3.9
3376/3/1	3.9
3376/4/1	3.9
3402/1/1	3.0
3402/2/1	3.0

Person ID number	Potato
3419/5/1	2.4
3419/6/1	2.4
3419/7/1	2.4
3419/8/1	2.4
3435/1/1	1.4
3435/2/1	1.4
3497/1/1	1.1
3498/3/1	1.0
3501/1/1	0.8
3501/2/1	0.8
3501/3/1	0.8
3501/4/1	0.8
3501/8/1	0.8
3416/1/1	0.8
3416/2/1	0.8
3416/3/1	0.8

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of potato for adults based on the 13 high-rate consumers is 29.6 kg y^{-1}

The observed 97.5th percentile rate based on 96 observations is 33.6 kg y^{-1}

Table 30. Adults' consumption rates of domestic fruit from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3498/1/1	**23.5**	**-**	**-**	**0.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.7**	**1.2**	**3.2**	**-**	**1.3**	**4.3**	**38.9**
3498/2/1	**23.5**	**-**	**-**	**0.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.7**	**1.2**	**3.2**	**-**	**1.3**	**4.3**	**38.9**
3513/1/1	**-**	**8.7**	**3.7**	**1.7**	**1.7**	**-**	**2.6**	**-**	**-**	**-**	**-**	**-**	**-**	**8.9**	**-**	**-**	**1.5**	**28.9**
3513/2/1	**-**	**8.7**	**3.7**	**1.7**	**1.7**	**-**	**2.6**	**-**	**-**	**-**	**-**	**-**	**-**	**8.9**	**-**	**-**	**1.5**	**28.9**
3646/1/1	**20.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.3**	**-**	**2.5**	**-**	**-**	**-**	**-**	**-**	**26.8**
3646/2/1	**20.0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.3**	**-**	**2.5**	**-**	**-**	**-**	**-**	**-**	**26.8**
3406/1/1	**6.8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8.4**	**7.2**	**-**	**-**	**-**	**22.4**
3367/1/1	**11.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**11.0**	**-**	**-**	**-**	**-**	**-**	**22.4**
3367/2/1	**11.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**11.0**	**-**	**-**	**-**	**-**	**-**	**22.4**
3371/1/1	**0.9**	**-**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**-**	**-**	**0.9**	**-**	**7.7**	**-**	**-**	**4.6**	**17.6**
3371/2/1	**0.9**	**-**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**-**	**-**	**0.9**	**-**	**7.7**	**-**	**-**	**4.6**	**17.6**
3371/3/1	**0.9**	**-**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**-**	**-**	**0.9**	**-**	**7.7**	**-**	**-**	**4.6**	**17.6**
3371/4/1	**0.9**	**-**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**-**	**-**	**0.9**	**-**	**7.7**	**-**	**-**	**4.6**	**17.6**
3435/1/1	-	-	0.1	-	-	-	0.3	-	-	2.4	-	-	-	4.1	0.1	1.4	3.6	11.9
3435/2/1	-	-	0.1	-	-	-	0.3	-	-	2.4	-	-	-	4.1	0.1	1.4	3.6	11.9
3503/1/1	-	-	-	-	-	-	-	-	-	-	-	-	5.0	1.5	-	1.1	3.0	10.6
3503/2/1	-	-	-	-	-	-	-	-	-	-	-	-	5.0	1.5	-	1.1	3.0	10.6
3433/1/1	-	6.0	-	-	-	-	0.1	-	-	-	-	-	-	1.0	-	-	3.4	10.5
3433/2/1	-	6.0	-	-	-	-	0.1	-	-	-	-	-	-	1.0	-	-	3.4	10.5
3433/3/1	-	6.0	-	-	-	-	0.1	-	-	-	-	-	-	1.0	-	-	3.4	10.5

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3423/1/1	5.0	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.0	6.5
3423/2/1	5.0	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.0	6.5
3423/3/1	5.0	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.0	6.5
3423/4/1	5.0	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.0	6.5
3373/1/1	-	0.2	0.5	-	-	-	1.5	-	4.0	-	-	-	-	-	-	-	-	6.2
3373/2/1	-	0.2	0.5	-	-	-	1.5	-	4.0	-	-	-	-	-	-	-	-	6.2
3506/1/1	1.3	0.1	1.0	-	-	-	1.0	-	0.3	-	-	-	-	1.0	-	0.9	0.5	6.0
3506/2/1	1.3	0.1	1.0	-	-	-	1.0	-	0.3	-	-	-	-	1.0	-	0.9	0.5	6.0
3476/1/1	1.6	-	-	-	-	-	-	-	-	-	-	1.6	1.6	-	-	-	-	4.9
3476/2/1	1.6	-	-	-	-	-	-	-	-	-	-	1.6	1.6	-	-	-	-	4.9
3476/3/1	1.6	-	-	-	-	-	-	-	-	-	-	1.6	1.6	-	-	-	-	4.9
3476/6/1	1.6	-	-	-	-	-	-	-	-	-	-	1.6	1.6	-	-	-	-	4.9
3386/1/1	1.7	-	-	-	-	-	-	-	-	-	-	1.7	1.0	-	-	-	-	4.3
3386/2/1	1.7	-	-	-	-	-	-	-	-	-	-	1.7	1.0	-	-	-	-	4.3
3386/3/1	1.7	-	-	-	-	-	-	-	-	-	-	1.7	1.0	-	-	-	-	4.3
3408/1/1	1.5	-	-	-	-	-	-	-	-	-	-	1.5	-	-	-	1.0	-	4.0
3408/2/1	1.5	-	-	-	-	-	-	-	-	-	-	1.5	-	-	-	1.0	-	4.0
3475/1/1	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0
3475/2/1	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0
3501/1/1	-	-	-	-	-	-	-	-	-	1.4	1.3	-	-	-	-	1.0	0.1	3.9
3501/2/1	-	-	-	-	-	-	-	-	-	1.4	1.3	-	-	-	-	1.0	0.1	3.9
3501/3/1	-	-	-	-	-	-	-	-	-	1.4	1.3	-	-	-	-	1.0	0.1	3.9

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3501/4/1	-	-	-	-	-	-	-	-	-	1.4	1.3	-	-	-	-	1.0	0.1	3.9
3501/8/1	-	-	-	-	-	-	-	-	-	1.4	1.3	-	-	-	-	1.0	0.1	3.9
3369/1/1	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/2	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/3	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/4	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/5	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/6	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/7	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/8	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/9	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/10	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/11	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/12	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/13	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/14	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/15	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/16	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/17	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/18	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/19	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1
3369/1/20	-	-	-	-	-	-	-	0.3	-	0.5	-	-	-	-	-	-	2.4	3.1

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3463/1/1	-	-	0.5	-	-	-	0.5	-	-	-	-	-	-	0.5	0.5	-	0.8	2.8
3463/2/1	-	-	0.5	-	-	-	0.5	-	-	-	-	-	-	0.5	0.5	-	0.8	2.8
3463/3/1	-	-	0.5	-	-	-	0.5	-	-	-	-	-	-	0.5	0.5	-	0.8	2.8
3402/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	2.3
3402/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	2.3
3500/1/1	-	-	0.2	-	-	-	-	-	-	-	-	0.5	-	1.0	-	-	0.4	2.1
3500/2/1	-	-	0.2	-	-	-	-	-	-	-	-	0.5	-	1.0	-	-	0.4	2.1
3430/1/1	1.0	-	-	-	-	-	-	-	-	-	-	0.9	-	0.1	-	-	-	2.0
3430/2/1	1.0	-	-	-	-	-	-	-	-	-	-	0.9	-	0.1	-	-	-	2.0
3512/1/1	0.5	-	-	-	-	-	-	-	-	-	-	0.5	1.0	-	-	-	-	2.0
3512/2/1	0.5	-	-	-	-	-	-	-	-	-	-	0.5	1.0	-	-	-	-	2.0
3419/1/1	-	-	-	0.1	-	-	-	-	-	-	-	-	1.3	0.1	-	0.4	-	1.9
3419/2/1	-	-	-	0.1	-	-	-	-	-	-	-	-	1.3	0.1	-	0.4	-	1.9
3498/3/1	1.0	-	-	0.03	-	-	-	-	-	-	-	0.2	0.1	0.1	-	0.1	0.2	1.7
3502/1/1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5
3502/2/1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5
3418/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4
3418/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4
3418/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4
3418/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4
3418/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4
3418/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	1.4

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3514/1/1	0.6	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	0.9
3514/2/1	0.6	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	0.9
3497/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.5	0.9
3477/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	-	0.9
3379/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	0.8
3379/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	0.8
3445/1/1	-	-	-	-	-	0.6	-	-	-	-	-	-	-	0.2	-	-	-	0.8
3445/2/1	-	-	-	-	-	0.6	-	-	-	-	-	-	-	0.2	-	-	-	0.8
3376/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.2	-	-	0.8
3376/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.2	-	-	0.8
3376/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.2	-	-	0.8
3376/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.2	-	-	0.8
3419/5/1	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.2	-	0.6
3419/6/1	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.2	-	0.6
3419/7/1	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.2	-	0.6
3419/8/1	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.2	-	0.6
3465/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0.6
3465/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0.6
3393/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.4	0.1	0.6
3393/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.4	0.1	0.6
3393/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.4	0.1	0.6
3443/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	0.6

Person ID number	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Cherry	Gooseberry	Grapes	Loganberry	Melon	Peach	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3443/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	0.6
3504/1/1	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	0.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for adults based on the 13 high-rate consumers is 25.2 kg y^{-1}

The observed 97.5th percentile rate based on 110 observations is 28.9 kg y^{-1}

Table 31. Adults' consumption rates of milk from the Aldermaston and Burghfield terrestrial survey area (l y^{-1})

Person ID number	Cows' milk
3424/9/1	208.6
3424/5/1	194.7
3424/6/1	194.7
3386/1/1	100.0
3386/2/1	100.0
3386/3/1	100.0
3424/1/1	91.3
3424/2/1	91.3
3424/4/1	91.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of milk for adults based on the 9 high-rate consumers is 130.2 l y^{-1}

The observed 97.5th percentile rate based on 9 observations is 205.8 l y^{-1}

Table 32. Adults' consumption rates of poultry from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Partridge	Pheasant	Pigeon	Total
3459/1/1	-	-	2.1	2.1
3483/1/1	-	0.9	0.5	1.4
3483/2/1	-	0.9	0.5	1.4
3461/1/1	0.5	0.7	-	1.1
3461/2/1	0.5	0.7	-	1.1
3652/1/1	-	0.9	-	0.9
3652/2/1	-	0.9	-	0.9
3652/3/1	-	0.9	-	0.9
3652/4/1	-	0.9	-	0.9
3652/5/1	-	0.9	-	0.9
3652/6/1	-	0.9	-	0.9
3459/2/1	-	-	0.7	0.7

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of poultry for adults based on the 11 high-rate consumers is 1.1 kg y^{-1}

The observed 97.5th percentile rate based on 12 observations is 1.9 kg y^{-1}

Table 33. Adults' consumption rates of eggs from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Chicken egg
3496/1/1	**29.7**
3496/2/1	**29.7**
3496/3/1	**29.7**
3496/4/1	**29.7**
3408/1/1	**27.7**
3408/2/1	**27.7**
3391/1/1	**17.8**
3391/2/1	**17.8**
3445/1/1	**17.8**
3445/2/1	**17.8**
3501/1/1	**11.8**
3501/2/1	**11.8**
3501/3/1	**11.8**
3501/4/1	**11.8**
3501/8/1	**11.8**
3652/1/1	**11.7**
3652/2/1	**11.7**
3652/3/1	**11.7**
3652/4/1	**11.7**
3652/5/1	**11.7**
3652/6/1	**11.7**
3482/1/1	**9.9**
3482/2/1	**9.9**
3482/3/1	**9.9**
3482/4/1	**9.9**
3482/5/1	**9.9**
3482/6/1	**9.9**
3402/1/1	8.9
3402/2/1	8.9
3459/1/1	8.9
3459/2/1	8.9
3460/1/1	8.9
3460/2/1	8.9
3460/3/1	8.9
3461/1/1	4.5
3461/2/1	4.5

Person ID number	Chicken egg
3441/1/1	1.3
3441/2/1	1.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of eggs for adults based on the 27 high-rate consumers is 16.1 kg y^{-1}

The observed 97.5th percentile rate based on 38 observations is 29.7 kg y^{-1}

Table 34. Adults' consumption rates of wild/free foods from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Blackberry	Garlic	Plum	Sloe	Total
3462/1/1	**5.0**	**-**	**5.0**	**-**	**10.0**
3462/2/1	**5.0**	**-**	**5.0**	**-**	**10.0**
3367/1/1	**4.0**	**-**	**-**	**2.0**	**6.0**
3367/2/1	**4.0**	**-**	**-**	**2.0**	**6.0**
3498/1/1	2.4	-	-	-	2.4
3498/2/1	2.4	-	-	-	2.4
3646/1/1	2.3	-	-	-	2.3
3646/2/1	2.3	-	-	-	2.3
3465/1/1	2.0	-	-	-	2.0
3465/2/1	2.0	-	-	-	2.0
3386/1/1	1.3	-	-	0.3	1.7
3386/2/1	1.3	-	-	0.3	1.7
3386/3/1	1.3	-	-	0.3	1.7
3483/1/1	1.1	-	-	-	1.1
3483/2/1	1.1	-	-	-	1.1
3504/1/1	0.6	0.1	-	-	0.7
3501/1/1	0.7	-	-	-	0.7
3501/2/1	0.7	-	-	-	0.7
3501/3/1	0.7	-	-	-	0.7
3501/4/1	0.7	-	-	-	0.7
3501/8/1	0.7	-	-	-	0.7
3512/1/1	0.5	-	-	-	0.5
3512/2/1	0.5	-	-	-	0.5
3440/1/1	0.4	-	-	-	0.4
3440/2/1	0.4	-	-	-	0.4
3514/1/1	0.3	-	-	-	0.3
3514/2/1	0.3	-	-	-	0.3
3418/1/1	0.3	-	-	-	0.3
3418/2/1	0.3	-	-	-	0.3
3418/3/1	0.3	-	-	-	0.3
3418/4/1	0.3	-	-	-	0.3
3418/5/1	0.3	-	-	-	0.3
3418/6/1	0.3	-	-	-	0.3
3419/1/1	0.2	-	-	-	0.2
3419/2/1	0.2	-	-	-	0.2
3373/1/1	-	0.1	-	-	0.1
3373/2/1	-	0.1	-	-	0.1
3498/3/1	0.1	-	-	-	0.1
3419/5/1	0.1	-	-	-	0.1

Person ID number	Blackberry	Garlic	Plum	Sloe	Total
3419/6/1	0.1	-	-	-	0.1
3419/7/1	0.1	-	-	-	0.1
3419/8/1	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 4 high-rate consumers is 8.0 kg y^{-1}

The observed 97.5th percentile rate based on 42 observations is 9.9 kg y^{-1}

Table 35. Adults' consumption rates of honey from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Honey
3387/1/1	**23.7**
3387/2/1	**23.7**
3368/1/1	6.8
3408/1/1	5.5
3408/2/1	5.5
3459/1/1	4.5
3459/2/1	4.5
3385/1/1	1.4
3385/2/1	1.4
3412/1/1	1.0
3412/2/1	1.0
3412/3/1	1.0
3411/1/1	1.0
3411/2/1	1.0
3482/1/1	0.9
3482/2/1	0.9
3482/3/1	0.9
3482/4/1	0.9
3482/5/1	0.9
3482/6/1	0.9
3402/1/1	0.5
3402/2/1	0.5
3391/1/1	0.3
3391/2/1	0.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of honey for adults based on the 2 high-rate consumers is 23.7 kg y^{-1}

The observed 97.5th percentile rate based on 24 observations is 23.7 kg y^{-1}

Table 36. Adults' consumption rates of wild fungi from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Mushrooms
3367/1/1	**2.5**
3367/2/1	**2.5**
3504/1/1	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild fungi for adults based on the 2 high-rate consumers is 2.5 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 2.5 kg y^{-1}

Table 37. Adults' consumption rates of venison from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Venison
3652/1/1	**0.3**
3652/2/1	**0.3**
3652/3/1	**0.3**
3652/4/1	**0.3**
3652/5/1	**0.3**
3652/6/1	**0.3**

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of venison for adults based on the 6 high-rate consumers is 0.3 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 0.3 kg y^{-1}

Table 38. Adults' consumption rates of goat meat from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Goat
3652/1/1	**6.7**
3652/2/1	**6.7**
3652/3/1	**6.7**
3652/4/1	**6.7**
3652/5/1	**6.7**
3652/6/1	**6.7**

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of goat meat for adults based on the 6 high-rate consumers is 6.7 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 6.7 kg y^{-1}

Table 39. Children's consumption rates of green vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Broccoli	Brussel sprout	Cabbage	Cauliflower	Courgette	Cucumber	Kale	Lettuce	Marrow	Total
3501/6/1	**10**	**-**	**3.1**	**3.1**	**2.7**	**5.4**	**0.8**	**0.8**	**-**	**2.6**	**18.4**
3501/7/1	**15**	**-**	**3.1**	**3.1**	**2.7**	**5.4**	**0.8**	**0.8**	**-**	**2.6**	**18.4**
3391/3/1	11	-	-	-	-	-	5.7	-	-	-	5.7
3433/4/1	15	1.0	0.7	-	-	-	0.9	-	0.1	-	2.7
3513/3/1	8	-	-	-	-	1.2	-	-	-	-	1.2
3513/4/1	6	-	-	-	-	1.2	-	-	-	-	1.2
3513/5/1	6	-	-	-	-	1.2	-	-	-	-	1.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for the child age group based on the 2 high-rate consumers is 18.4 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 18.4 kg y^{-1}

Table 40. Infants' consumption rates of green vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Asparagus	Broccoli	Brussel sprout	Cabbage	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Marrow	Spinach	Total
3501/5/1	**5**	**-**	**-**	**1.5**	**1.5**	**1.3**	**-**	**2.7**	**0.4**	**0.4**	**-**	**1.3**	**-**	**9.2**
3514/3/1	**5**	**-**	**0.8**	**-**	**-**	**-**	**-**	**-**	**1.1**	**-**	**-**	**7.0**	**-**	**8.9**
3393/5/1	3	0.3	-	1.2	-	-	-	-	-	-	0.3	-	-	1.7
3498/4/1	4	0.04	0.2	0.1	0.1	-	0.2	0.2	-	0.2	-	-	0.02	0.9
3498/5/1	2	0.04	0.2	0.1	0.1	-	0.2	0.2	-	0.2	-	-	0.02	0.9
3393/4/1	1	0.1	-	0.6	-	-	-	-	-	-	0.1	-	-	0.9
3513/6/1	2	-	-	-	-	-	-	0.5	-	-	-	-	-	0.5

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 9.1 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 9.2 kg y^{-1}

Table 41. Children's consumption rates of other vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Broad bean	Chilli pepper	French bean	Pepper	Runner bean	Squash	Sweetcorn	Tomato	Total
3433/4/1	**15**	**1.4**	**-**	**0.5**	**1.5**	**2.6**	**2.3**	**0.7**	**9.0**	**17.9**
3513/3/1	**8**	**-**	**-**	**-**	**-**	**2.1**	**0.9**	**0.6**	**11.8**	**15.4**
3513/4/1	**6**	**-**	**-**	**-**	**-**	**2.1**	**0.9**	**0.6**	**11.8**	**15.4**
3513/5/1	**6**	**-**	**-**	**-**	**-**	**2.1**	**0.9**	**0.6**	**11.8**	**15.4**
3501/6/1	**10**	**-**	**0.01**	**-**	**-**	**4.5**	**0.8**	**1.8**	**8.2**	**15.4**
3501/7/1	**15**	**-**	**0.01**	**-**	**-**	**4.5**	**0.8**	**1.8**	**8.2**	**15.4**
3391/3/1	**11**	**-**	**-**	**-**	**0.3**	**-**	**-**	**-**	**6.0**	**6.3**
3419/3/1	9	0.4	-	-	-	1.8	-	-	-	2.2

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for the child age group based on the 7 high-rate consumers is 14.5 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 17.5 kg y^{-1}

Table 42. Infants' consumption rates of other vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Runner bean	Squash	Sweetcorn	Tomato	Total
3501/5/1	**5**	**-**	**0.01**	**-**	**-**	**-**	**2.3**	**0.4**	**0.9**	**4.1**	**7.7**
3513/6/1	**2**	**-**	**-**	**-**	**-**	**-**	**0.9**	**0.4**	**0.3**	**5.2**	**6.8**
3393/5/1	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.8**	**4.8**
3514/3/1	5	-	-	-	-	0.3	-	0.8	-	1.4	2.5
3393/4/1	1	-	-	-	-	-	-	-	-	2.4	2.4
3419/4/1	4	0.2	-	-	-	-	1.2	-	-	-	1.5
3498/4/1	4	-	-	0.1	0.01	0.02	0.2	0.2	0.2	0.1	0.9
3498/5/1	2	-	-	0.1	0.01	0.02	0.2	0.2	0.2	0.1	0.9

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for the infant age group based on the 3 high-rate consumers is 6.4 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 7.5 kg y^{-1}

Table 43. Children's consumption rates of root vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Beetroot	Carrot	Celery	Leek	Onion	Parsnip	Radish	Shallot	Total
3513/3/1	**8**	**1.5**	**4.1**	**-**	**0.7**	**2.4**	**-**	**-**	**-**	**8.6**
3513/4/1	**6**	**1.5**	**4.1**	**-**	**0.7**	**2.4**	**-**	**-**	**-**	**8.6**
3513/5/1	**6**	**1.5**	**4.1**	**-**	**0.7**	**2.4**	**-**	**-**	**-**	**8.6**
3501/6/1	**10**	**-**	**1.2**	**1.2**	**1.3**	**2.5**	**1.4**	**-**	**-**	**7.6**
3501/7/1	**15**	**-**	**1.2**	**1.2**	**1.3**	**2.5**	**1.4**	**-**	**-**	**7.6**
3433/4/1	**15**	**-**	**0.6**	**2.1**	**2.0**	**2.2**	**0.4**	**0.1**	**-**	**7.4**
3419/3/1	9	0.1	0.1	-	0.2	0.1	-	-	0.1	0.6

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for the child age group based on the 6 high-rate consumers is 8.1 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 8.6 kg y^{-1}

Table 44. Infants' consumption rates of root vegetables from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Beetroot	Carrot	Celeriac	Celery	Fennel	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Swede	Total
3513/6/1	**2**	**0.6**	**1.8**	**-**	**-**	**-**	**0.3**	**1.0**	**-**	**-**	**-**	**-**	**-**	**3.8**
3501/5/1	**5**	**-**	**0.6**	**-**	**0.6**	**-**	**0.6**	**1.2**	**0.7**	**-**	**-**	**-**	**-**	**3.8**
3498/4/1	**4**	**0.3**	**0.3**	**0.1**	**-**	**0.1**	**0.1**	**-**	**0.2**	**-**	**-**	**0.1**	**0.2**	**1.4**
3498/5/1	**2**	**0.3**	**0.3**	**0.1**	**-**	**0.1**	**0.1**	**-**	**0.2**	**-**	**-**	**0.1**	**0.2**	**1.4**
3514/3/1	5	0.5	-	-	-	-	-	-	-	-	-	-	-	0.5
3419/4/1	4	0.1	0.1	-	-	-	0.1	0.04	-	-	0.04	-	-	0.4
3393/5/1	3	-	-	-	-	-	-	-	-	-	-	0.02	-	0.02
3393/4/1	1	-	-	-	-	-	-	-	-	-	-	0.01	-	0.01

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of root vegetables for the infant age group based on the 4 high-rate consumer is 2.6 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 3.8 kg y^{-1}

Table 45. Children's consumption rates of potato from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Potato
3433/4/1	**15**	**11.9**
3513/3/1	8	3.3
3513/4/1	6	3.3
3513/5/1	6	3.3
3419/3/1	9	1.8
3501/6/1	10	0.8
3501/7/1	15	0.8

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of potato for the child age group based on the 1 high-rate consumers is 11.9 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 10.6 kg y^{-1}

Table 46. Infants' consumption rates of potato from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Potato
3513/6/1	**2**	**1.5**
3419/4/1	**4**	**1.2**
3498/4/1	**4**	**1.0**
3498/5/1	**2**	**1.0**
3501/5/1	5	0.4

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of potato for the infant age group based on the 4 high-rate consumers is 1.2 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 1.4 kg y^{-1}

Table 47. Children's consumption rates of domestic fruit from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Gooseberry	Melon	Peach	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Total
3513/3/1	**8**	**-**	**6.5**	**2.8**	**1.3**	**1.3**	**2.0**	**-**	**-**	**-**	**6.7**	**-**	**-**	**1.1**	**21.7**
3513/4/1	**6**	**-**	**6.5**	**2.8**	**1.3**	**1.3**	**2.0**	**-**	**-**	**-**	**6.7**	**-**	**-**	**1.1**	**21.7**
3513/5/1	**6**	**-**	**6.5**	**2.8**	**1.3**	**1.3**	**2.0**	**-**	**-**	**-**	**6.7**	**-**	**-**	**1.1**	**21.7**
3435/3/1	**10**	**-**	**-**	**0.1**	**-**	**-**	**0.3**	**2.4**	**-**	**-**	**4.1**	**0.1**	**1.4**	**3.6**	**11.9**
3433/4/1	**15**	**-**	**6.0**	**-**	**-**	**-**	**0.1**	**-**	**-**	**-**	**1.0**	**-**	**-**	**3.4**	**10.5**
3501/6/1	10	-	-	-	-	-	-	1.4	1.3	-	-	-	1.0	0.1	3.9
3501/7/1	15	-	-	-	-	-	-	1.4	1.3	-	-	-	1.0	0.1	3.9
3502/3/1	14	1.5	-	-	-	-	-	-	-	-	-	-	-	-	1.5
3502/4/1	14	1.5	-	-	-	-	-	-	-	-	-	-	-	-	1.5
3419/3/1	9	-	-	-	-	-	-	-	-	0.4	-	-	0.1	-	0.5

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for the child age group based on the 5 high-rate consumers is 17.5 kg y^{-1}

The observed 97.5th percentile rate based on 10 observations is 21.7 kg y^{-1}

Table 48. Infants' consumption rates of domestic fruit from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Apple	Blackberry	Blackcurrant	Blueberry	Boysenberry	Gooseberry	Melon	Peach	Pear	Plum	Raspberry	Rhubarb	Strawberry	Total
3513/6/1	**2**	**-**	**2.9**	**1.2**	**0.6**	**0.6**	**0.9**	**-**	**-**	**-**	**-**	**2.9**	**-**	**0.5**	**9.5**
3475/3/1	5	2.0	-	-	-	-	-	-	-	-	-	-	-	-	2.0
3501/5/1	5	-	-	-	-	-	-	0.7	0.7	-	-	-	0.5	0.1	1.9
3498/4/1	4	1.0	-	-	0.03	-	-	-	-	0.2	0.1	0.1	0.1	0.2	1.7
3498/5/1	2	1.0	-	-	0.03	-	-	-	-	0.2	0.1	0.1	0.1	0.2	1.7
3476/4/1	2	0.5	-	-	-	-	-	-	-	0.5	0.5	-	-	-	1.6
3476/5/1	1	0.4	-	-	-	-	-	-	-	0.4	0.4	-	-	-	1.2
3514/3/1	5	0.3	-	-	-	-	-	-	-	-	-	0.2	-	-	0.5
3419/4/1	4	-	-	-	-	-	-	-	-	-	0.2	-	0.1	-	0.3
3393/5/1	3	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.03	0.3
3393/4/1	1	-	-	-	-	-	-	-	-	-	-	0.03	0.1	0.01	0.1

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of domestic fruit for the infant age group based on the 1 high-rate consumer is 9.5 kg y^{-1}

The observed 97.5th percentile rate based on 11 observations is 7.7 kg y^{-1}

Table 49. Children's consumption rates of milk from the Aldermaston and Burghfield terrestrial survey area (l y^{-1})

Person ID number	Age	Cows' milk
3424/8/1	**10**	**194.7**
3424/10/1	**8**	**156.4**
3424/7/1	**8**	**146.0**
3424/3/1	**12**	**91.3**

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of milk for the child age group based on the 4 high-rate consumers is 147.1 l y^{-1}

The observed 97.5th percentile rate based on 4 observations is 191.8 kg y^{-1}

Table 50. Children's consumption rates of poultry from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Partridge	Pheasant	Total
3461/3/1	**15**	**0.5**	**0.7**	**1.1**
3461/4/1	**13**	**0.5**	**0.7**	**1.1**

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of poultry for the child age group based on the 2 high-rate consumers is 1.1 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.1 kg y^{-1}

Table 51. Children's consumption rates of eggs from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Chicken egg
3391/3/1	**11**	**17.8**
3501/6/1	**10**	**11.8**
3501/7/1	**15**	**11.8**
3461/3/1	15	4.5
3461/4/1	13	4.5
3441/4/1	6	0.9

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 13.8 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 17.1 kg y^{-1}

Table 52. Infants' consumption rates of eggs from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Chicken egg
3501/5/1	**5**	**5.9**
3441/3/1	4	0.6

Notes

The emboldened observation is the high-rate consumer

The mean consumption rate of eggs for the infant age group based on the 1 high-rate consumer is 5.9 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 5.8 kg y^{-1}

Table 53. Children's consumption rates of wild/free foods from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Blackberry
3501/6/1	**10**	**0.7**
3501/7/1	**15**	**0.7**
3419/3/1	9	0.04

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of wild/free foods for the child age group based on the 2 high-rate consumers is 0.7 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 0.7 kg y^{-1}

Table 54. Infants' consumption rates of wild/free foods from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Blackberry
3501/5/1	**5**	**0.3**
3514/3/1	**5**	**0.2**
3498/4/1	4	0.1
3498/5/1	2	0.1
3419/4/1	4	0.03

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 0.2 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 0.3 kg y^{-1}

Table 55. Children's consumption rates of honey from the Aldermaston and Burghfield terrestrial survey area (kg y^{-1})

Person ID number	Age	Honey
3412/4/1	**15**	**1.0**
3391/3/1	11	0.3

Notes

Emboldened observations are the high-rate consumers

The mean consumption rate of honey for the child age group based on the 1 high-rate consumer is 1.0 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.0 kg y^{-1}

Table 56. Percentage contribution each food type makes to its terrestrial food group for adults

Green vegetables		Other vegetables		Root vegetables		Domestic fruit		Poultry	
Cabbage	23.5%	Tomato	54.6%	Carrot	21.0%	Apple	27.0%	Pheasant	65.1%
Courgette	22.6%	Runner bean	14.5%	Onion	18.7%	Strawberry	17.3%	Pigeon	28.0%
Cucumber	22.6%	Squash	9.2%	Swede	16.7%	Raspberry	15.0%	Partridge	6.9%
Brussel sprout	7.6%	Pumpkin	5.0%	Beetroot	15.6%	Pear	9.1%	**Eggs**	
Broccoli	4.7%	Sweetcorn	4.5%	Leek	10.3%	Plum	5.7%	Chicken egg	100.0%
Marrow	4.1%	Broad bean	4.4%	Parsnip	6.0%	Blackberry	5.6%	**Wild/free foods**	
Lettuce	4.1%	Pepper	2.5%	Sweet potato	3.5%	Melon	4.8%	Blackberry	75.1%
Kale	3.2%	Pea	2.2%	Celery	1.7%	Rhubarb	4.4%	Plum	16.2%
Cauliflower	2.0%	French bean	1.9%	Shallot	1.6%	Gooseberry	4.2%	Sloe	8.1%
Chard	2.0%	Okra	0.7%	Garlic	1.3%	Blackcurrant	1.9%	Garlic	0.5%
Artichoke	1.9%	Cannellini	0.2%	Celeriac	1.3%	Loganberry	1.3%	**Honey**	
Asparagus	1.0%	Mangetout	0.1%	Radish	0.6%	Peach	1.0%	Honey	100.0%
Spinach	0.8%	Chilli pepper	0.1%	Fennel	0.6%	Blueberry	0.8%	**Wild fungi**	
		Aubergine	0.1%	Spring onion	0.5%	Grape	0.8%	Mushroom	100.0%
				Turnip	0.4%	Boysenberry	0.5%	**Venison**	
				Horseradish	0.3%	Redcurrant	0.4%	Venison	100.0%
				Kohl rabi	0.1%	Cherry	0.2%	**Goat meat**	
				Potato		**Milk**		Goat	100.0%
				Potato	100.0%	Cows' milk	100.0%		

Table 57. Direct radiation occupancy rates for adults, children and infants in the Aldermaston and Burghfield area (h y^{-1})

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
0 to 0.25 km zone					
3397/2/1	Aldermaston	Residing	8107	601	8708
3393/1/1	Burghfield	Residing	6883	1799	8682
3393/4/1	Burghfield	Residing	6883	1799	8682
3496/3/1	Aldermaston	Residing	7926	730	8656
3496/4/1	Aldermaston	Residing	7926	730	8656
3496/1/1	Aldermaston	Residing	6779	1825	8604
3396/1/1	Aldermaston	Residing	8536	26	8562
3396/2/1	Aldermaston	Residing	8496	65	8562
3497/1/1	Burghfield	Residing	7986	457	8442
3425/1/1	Aldermaston	Residing	8232	130	8362
3479/2/1	Burghfield	Residing	8180	92	8272
3426/1/1	Aldermaston	Residing	7508	627	8135
3479/1/1	Burghfield	Residing	8065	46	8111
3496/2/1	Aldermaston	Residing	7665	365	8030
3393/3/1	Burghfield	Residing	6101	1799	7900
3397/3/1	Aldermaston	Residing	7145	601	7745
3398/2/1	Aldermaston	Residing	6619	1084	7703
3393/5/1	Burghfield	Residing	5710	1799	7509
3398/1/1	Aldermaston	Residing	6312	1084	7397
3397/1/1	Aldermaston	Residing	6689	601	7290
3479/4/1	Burghfield	Residing	6621	25	6646
3426/2/1	Aldermaston	Residing	6105	22	6127
3393/2/1	Burghfield	Residing	5364	599	5963
3479/3/1	Burghfield	Working	-	2891	2891

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
0 to 0.25 km zone					
3404/1/1	Aldermaston	Residing	2266	24	2290
3404/2/1	Aldermaston	Working	2266	24	2290
3404/1/2	Aldermaston	Working	2266	24	2290
3404/2/2	Aldermaston	Working	2266	24	2290
3404/1/3	Aldermaston	Working	2266	24	2290
3403/1/1	Aldermaston	Working	1902	24	1926
3403/2/1	Aldermaston	Working	1902	24	1926
3403/1/2	Aldermaston	Working	1902	24	1926
3403/2/2	Aldermaston	Working	1902	24	1926
3403/1/3	Aldermaston	Working	1902	24	1926
3403/2/3	Aldermaston	Working	1902	24	1926
3403/1/4	Aldermaston	Working	1902	24	1926
3403/1/5	Aldermaston	Working	1902	24	1926
3403/1/6	Aldermaston	Working	1902	24	1926
3403/1/7	Aldermaston	Working	1902	24	1926
3652/7/1	Burghfield	Working	-	1825	1825
3652/1/1	Burghfield	Working	-	912	912
>0.25 to 0.5 km zone					
3455/1/1	Burghfield	Residing	8147	200	8347
3455/3/1	Burghfield	Residing	7845	78	7923
3400/1/1	Aldermaston	Residing	6298	1454	7752
3401/4/1	Aldermaston	Residing	7199	393	7593
3401/2/1	Aldermaston	Residing	7101	393	7494
3503/1/1	Burghfield	Residing	6236	1189	7425
3401/1/1	Aldermaston	Residing	6782	393	7175
3503/2/1	Burghfield	Residing	6437	549	6986

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.25 to 0.5 km zone					
3455/2/1	Burghfield	Residing	6114	52	6166
3401/3/1	Aldermaston	Residing	5750	393	6143
3405/1/1	Aldermaston	Working	2742	20	2762
3405/2/1	Aldermaston	Working	2742	20	2762
3405/2/2	Aldermaston	Working	2742	20	2762
3405/2/3	Aldermaston	Working	2742	20	2762
3407/1/1	Aldermaston	Working	2007	21	2028
3407/2/1	Aldermaston	Working	2007	21	2028
3407/1/2	Aldermaston	Working	2007	21	2028
3407/2/2	Aldermaston	Working	2007	21	2028
3407/2/3	Aldermaston	Working	2007	21	2028
3407/2/4	Aldermaston	Working	2007	21	2028
3651/1/1	Aldermaston	Working	1995	-	1995
3651/1/2	Aldermaston	Working	1995	-	1995
3651/1/3	Aldermaston	Working	1995	-	1995
3651/1/4	Aldermaston	Working	1995	-	1995
3651/1/5	Aldermaston	Working	1995	-	1995
3407/3/1	Aldermaston	Working	655	4	659
3407/3/2	Aldermaston	Working	655	4	659
3407/3/3	Aldermaston	Working	655	4	659
3407/3/4	Aldermaston	Working	655	4	659
3651/2/1	Aldermaston	Working	581	-	581
>0.5 to 1.0 km zone					
3442/1/1	Burghfield	Residing	8553	183	8736
3481/1/1	Burghfield	Residing	7977	548	8525
3481/3/1	Burghfield	Residing	7977	548	8525

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3481/2/1	Burghfield	Residing	8291	104	8395
3440/2/1	Burghfield	Residing	7848	548	8395
3427/1/1	Aldermaston	Residing	6840	1477	8317
3473/1/1	Aldermaston	Residing	8190	101	8292
3473/2/1	Aldermaston	Residing	8190	101	8292
3475/2/1	Burghfield	Residing	7977	209	8186
3476/3/1	Burghfield	Residing	7540	548	8088
3440/1/1	Burghfield	Residing	6337	1736	8073
3443/1/1	Burghfield	Residing	6386	1644	8030
3443/2/1	Burghfield	Residing	6386	1644	8030
3439/2/1	Burghfield	Residing	7040	967	8007
3510/1/1	Burghfield	Residing	7455	522	7978
3502/1/1	Burghfield	Residing	7622	351	7973
3482/6/1	Burghfield	Residing	7561	365	7926
3474/1/1	Aldermaston	Residing	7142	758	7900
3476/2/1	Burghfield	Residing	6617	1279	7895
3475/1/1	Burghfield	Residing	7482	392	7874
3439/1/1	Burghfield	Residing	6887	967	7854
3477/1/1	Burghfield	Residing	7170	627	7797
3402/1/1	Aldermaston	Residing	7047	732	7779
3402/2/1	Aldermaston	Residing	7047	732	7779
3438/2/1	Burghfield	Residing	7118	561	7679
3514/2/1	Burghfield	Residing	7049	598	7647
3470/1/1	Aldermaston	Residing	7088	522	7610
3469/1/1	Aldermaston	Residing	7111	457	7568
3509/1/1	Aldermaston	Residing	6795	631	7426

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3509/2/1	Aldermaston	Residing	7089	337	7426
3514/1/1	Burghfield	Residing	6884	487	7371
3439/4/1	Burghfield	Residing	7252	104	7356
3504/1/1	Burghfield	Residing	6205	1095	7300
3476/4/1	Burghfield	Residing	6125	1096	7221
3476/5/1	Burghfield	Residing	6125	1096	7221
3438/1/1	Burghfield	Residing	6372	561	6933
3469/2/1	Aldermaston	Residing	6433	496	6929
3512/1/1	Burghfield	Residing	5414	1421	6834
3476/1/1	Burghfield	Residing	5551	1279	6829
3502/2/1	Burghfield	Residing	6405	366	6771
3512/3/1	Burghfield	Residing	6552	61	6613
3474/2/1	Aldermaston	Residing	5705	758	6463
3502/3/1	Burghfield	Residing	6424	-	6424
3502/4/1	Burghfield	Residing	6424	-	6424
3514/3/1	Burghfield	Residing	6348	30	6378
3439/6/1	Burghfield	Residing	6273	104	6377
3441/2/1	Burghfield	Residing	5641	732	6372
3379/1/1	Aldermaston	Residing	5431	914	6344
3441/1/1	Burghfield	Residing	5536	732	6268
3512/2/1	Burghfield	Residing	5024	1238	6262
3438/3/1	Burghfield	Residing	6001	141	6142
3482/1/1	Burghfield	Residing	5762	365	6127
3482/2/1	Burghfield	Residing	5762	365	6127
3482/3/1	Burghfield	Residing	5762	365	6127
3482/4/1	Burghfield	Residing	5762	365	6127

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3482/5/1	Burghfield	Residing	5762	365	6127
3469/3/1	Aldermaston	Residing	5486	457	5943
3439/3/1	Burghfield	Residing	5777	-	5777
3476/6/1	Burghfield	Residing	5392	361	5753
3483/2/1	Burghfield	Residing	5405	308	5713
3439/5/1	Burghfield	Residing	5406	226	5632
3480/1/1	Burghfield	Residing	4478	1045	5523
3441/3/1	Burghfield	Residing	4774	732	5506
3441/4/1	Burghfield	Residing	4774	732	5506
3483/1/1	Burghfield	Residing	4675	618	5293
3480/2/1	Burghfield	Residing	3724	1027	4752
3510/3/1	Burghfield	Residing	4406	183	4589
3379/2/1	Aldermaston	Residing	3298	1206	4504
3510/2/1	Burghfield	Residing	2920	-	2920
3473/3/1	Aldermaston	Residing	2313	548	2861
3488/1/1	Aldermaston	Working	2147	239	2386
3488/1/2	Aldermaston	Working	2147	239	2386
3488/1/3	Aldermaston	Working	2147	239	2386
3488/1/4	Aldermaston	Working	2147	239	2386
3484/1/1	Burghfield	Working	2064	295	2359
3484/2/1	Burghfield	Working	2064	295	2359
3484/3/1	Burghfield	Working	2064	295	2359
3484/4/1	Burghfield	Working	2064	295	2359
3654/1/1	Burghfield	Working	2290	-	2290
3654/2/1	Burghfield	Working	2290	-	2290
3654/1/2	Burghfield	Working	2290	-	2290

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3654/2/2	Burghfield	Working	2290	-	2290
3654/1/3	Burghfield	Working	2290	-	2290
3654/2/3	Burghfield	Working	2290	-	2290
3410/2/1	Aldermaston	Working	2008	20	2028
3410/3/1	Aldermaston	Working	2008	20	2028
3410/3/2	Aldermaston	Working	2008	20	2028
3410/3/3	Aldermaston	Working	2008	20	2028
3409/3/1	Aldermaston	Working	1889	20	1908
3409/4/1	Aldermaston	Working	1889	20	1908
3486/1/1	Burghfield	Working	1670	239	1908
3486/2/1	Burghfield	Working	1670	239	1908
3409/3/2	Aldermaston	Working	1889	20	1908
3409/4/2	Aldermaston	Working	1889	20	1908
3486/1/2	Burghfield	Working	1670	239	1908
3486/2/2	Burghfield	Working	1670	239	1908
3409/3/3	Aldermaston	Working	1889	20	1908
3409/4/3	Aldermaston	Working	1889	20	1908
3486/1/3	Burghfield	Working	1670	239	1908
3486/2/3	Burghfield	Working	1670	239	1908
3409/3/4	Aldermaston	Working	1889	20	1908
3409/4/4	Aldermaston	Working	1889	20	1908
3486/2/4	Burghfield	Working	1670	239	1908
3657/1/1	Burghfield	Working	1479	286	1765
3657/2/1	Burghfield	Working	1765	-	1765
3657/3/1	Burghfield	Working	1479	286	1765
3655/1/1	Aldermaston	Working	1757	-	1757

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3410/1/1	Aldermaston	Working	1606	16	1622
3655/2/1	Aldermaston	Working	1406	-	1406
3409/1/1	Aldermaston	Working	942	12	954
3409/2/1	Aldermaston	Working	942	12	954
3488/2/1	Aldermaston	Working	859	95	954
3488/3/1	Aldermaston	Working	859	95	954
3488/2/2	Aldermaston	Working	859	95	954
3654/3/1	Burghfield	Working	835	-	835
3654/4/1	Burghfield	Working	835	-	835
3654/3/2	Burghfield	Working	835	-	835
3654/4/2	Burghfield	Working	835	-	835
3657/4/1	Burghfield	Working	811	-	811
3657/5/1	Burghfield	Working	811	-	811
3657/6/1	Burghfield	Working	811	-	811
3488/4/1	Aldermaston	Working	644	48	692
3488/4/2	Aldermaston	Working	644	48	692
3488/4/3	Aldermaston	Working	644	48	692
3486/3/1	Burghfield	Working	429	239	668
3486/4/1	Burghfield	Working	429	239	668
3486/3/2	Burghfield	Working	429	239	668
3486/4/2	Burghfield	Working	429	239	668
3486/3/3	Burghfield	Working	429	239	668
3486/4/3	Burghfield	Working	429	239	668
3486/4/4	Burghfield	Working	429	239	668
3475/3/1	Burghfield	Visiting	573	52	626
3454/4/1	Burghfield	Horse riding	-	365	365

Person ID number	Location	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 to 1.0 km zone					
3454/4/2	Burghfield	Horse riding	-	365	365
3454/4/3	Burghfield	Horse riding	-	365	365
3454/4/4	Burghfield	Horse riding	-	365	365
3454/4/5	Burghfield	Horse riding	-	365	365
3454/4/6	Burghfield	Horse riding	-	365	365
3454/4/7	Burghfield	Horse riding	-	365	365
3454/4/8	Burghfield	Horse riding	-	365	365
3454/4/9	Burghfield	Horse riding	-	365	365
3454/4/10	Burghfield	Horse riding	-	365	365
3454/1/1	Burghfield	Horse riding	-	336	336
3454/2/1	Burghfield	Horse riding	-	336	336
3454/3/1	Burghfield	Horse riding	-	336	336
3655/3/1	Aldermaston	Working	72	-	72
3655/3/2	Aldermaston	Working	72	-	72
3655/3/3	Aldermaston	Working	72	-	72
3655/3/4	Aldermaston	Working	72	-	72
3655/3/5	Aldermaston	Working	72	-	72
3655/3/6	Aldermaston	Working	72	-	72
3655/3/7	Aldermaston	Working	72	-	72
3655/3/8	Aldermaston	Working	72	-	72
3505/1/1	Burghfield	Working	-	6	6

Table 58. Analysis of direct radiation occupancy rates for adults, children and infants in the Aldermaston and Burghfield area (h y^{-1})

0 – 0.25 km zone	
Number of hours	**Number of observations**
>8000 to 8760	14
>7000 to 8000	6
>6000 to 7000	2
>5000 to 6000	1
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	6
>1000 to 2000	11
0 to 1000	1
0 to 8760	41
>0.25 – 0.5 km zone	
Number of hours	**Number of observations**
>8000 to 8760	1
>7000 to 8000	6
>6000 to 7000	3
>5000 to 6000	0
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	10
>1000 to 2000	5
0 to 1000	5
0 to 8760	30
>0.5 – 1.0 km zone	
Number of hours	**Number of observations**
>8000 to 8760	14
>7000 to 8000	21
>6000 to 7000	21
>5000 to 6000	9
>4000 to 5000	3
>3000 to 4000	0
>2000 to 3000	20
>1000 to 2000	21
0 to 1000	45
0 to 8760	154

Table 59. Gamma dose rate measurements for the Aldermaston and Burghfield direct radiation survey area (µG h^{-1})

Location		Indoor substrate	Indoor gamma dose rate at 1 metre[a]	Outdoor substrate	Outdoor gamma dose rate at 1 metre[a]
Residences					
Residence 1	Aldermaston	Not Recorded	Not Recorded	Grass	0.077
Residence 2	Aldermaston	Concrete	0.103	Grass	0.081
Residence 3	Aldermaston	Concrete	0.081	Concrete	0.100
Residence 4	Aldermaston	Concrete	0.091	Not Recorded	Not Recorded
Residence 5	Aldermaston	Not Recorded	Not Recorded	Concrete	0.089
Residence 6	Aldermaston	Not Recorded	Not Recorded	Grass	0.079
Residence 7	Aldermaston	Not Recorded	Not Recorded	Grass	0.072
Residence 8	Aldermaston	Wood	0.090	Grass	0.075
Residence 9	Aldermaston	Concrete	0.108	Grass	0.083
Residence 10	Aldermaston	Not Recorded	Not Recorded	Grass	0.087
Residence 11	Aldermaston	Not Recorded	Not Recorded	Concrete	0.093
Residence 12	Burghfield	Not Recorded	Not Recorded	Grass	0.067
Residence 13	Burghfield	Concrete	0.085	Grass	0.071
Residence 14	Burghfield	Concrete	0.088	Grass	0.072
Residence 15	Burghfield	Stone	0.068	Grass	0.068
Residence 16	Burghfield	Concrete	0.096	Grass	0.078
Residence 17	Burghfield	Not Recorded	Not Recorded	Grass	0.079
Residence 18	Burghfield	Not Recorded	Not Recorded	Grass	0.070
Residence 19	Aldermaston	Concrete	0.097	Concrete	0.077
Residence 20	Aldermaston	Wood	0.102	Grass	0.073
Residence 21	Aldermaston	Concrete	0.087	Stones	0.067
Residence 22	Aldermaston	Wood	0.106	Stones	0.077

Location		Indoor substrate	Indoor gamma dose rate at 1 metre[a]	Outdoor substrate	Outdoor gamma dose rate at 1 metre[a]
Residences					
Residence 23	Burghfield	Concrete	0.067	Grass	0.082
Residence 24	Burghfield	Concrete	0.079	Grass	0.077
Residence 25	Burghfield	Not Recorded	Not Recorded	Stones	0.073
Residence 26	Burghfield	Concrete	0.074	Concrete	0.076
Residence 27	Burghfield	Wood	0.098	Grass	0.091
Residence 28	Burghfield	Not Recorded	Not Recorded	Grass	0.074
Residence 29	Burghfield	Concrete	0.075	Stones	0.073
Residence 30	Aldermaston	Not Recorded	Not Recorded	Grass	0.061
Residence 31	Aldermaston	Concrete	0.101	Grass	0.082
Residence 32	Burghfield	Concrete	0.084	Grass	0.069
Residence 33	Burghfield	Concrete	0.090	Grass	0.081
Residence 34	Burghfield	Stone	0.099	Grass	0.082
Residence 35	Aldermaston	Not Recorded	Not Recorded	Stones	0.072
Residence 36	Burghfield	Not Recorded	Not Recorded	Concrete	0.072
Residence 37	Burghfield	Concrete	0.077	Grass	0.074
Residence 38	Burghfield	Concrete	0.081	Grass	0.073
Businesses					
Business 1	Aldermaston	Concrete	0.064	Concrete	0.063
Business 2	Aldermaston	Concrete	0.062	Concrete	0.064
Business 3	Aldermaston	Concrete	0.063	Concrete	0.071
Business 4	Aldermaston	Concrete	0.070	Concrete	0.082
Business 5	Aldermaston	Concrete	0.065	Concrete	0.068
Business 6	Aldermaston	Concrete	0.063	Concrete	0.070
Business 7	Aldermaston	Concrete	0.065	Concrete	0.078

Location		Indoor substrate	Indoor gamma dose rate at 1 metre[a]	Outdoor substrate	Outdoor gamma dose rate at 1 metre[a]
Businesses					
Business 8	Burghfield	Wood	0.080	Grass	0.071
Business 9	Burghfield	Concrete	0.092	Stones	0.073
Business 10	Burghfield	Concrete	0.061	Grass	0.075
Business 11	Burghfield	Not Recorded	Not Recorded	Grass	0.075
Business 12	Aldermaston	Concrete	0.085	Concrete	0.068
Business 13	Aldermaston	Concrete	0.075	Not Recorded	Not Recorded

Notes

[a] These measurements have not been adjusted for background dose rates

Table 60. Background gamma dose rate measurements for the Aldermaston and Burghfield survey area (µGy h^{-1})

Location		National Grid Reference	Substrate	Gamma dose rate at 1 metre[a]
Background 1	South of Mortimer	SU 654 631	Grass	0.071
Background 2	South-west of Tadley	SU 566 607	Grass	0.075
Background 3	Midgham Green	SU 563 683	Grass	0.067
Background 4	North of Theale	SU 637 720	Grass	0.063
Background 5	Whitley	SU 727 707	Grass	0.072
Background 6	Swallowfield	SU 727 649	Grass	0.079

Table 61. Combinations of adult pathways for consideration in dose assessments in the Aldermaston and Burghfield area

Combination number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat Meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Indoor occupancy within 1 km of the licensed site	Outdoor occupancy within 1 km of the licensed site
1																	X			
2														X				X		
3															X	X		X		
4	X	X		X	X			X		X									X	X
5							X	X		X										
6	X		X		X			X		X										
7	X	X	X	X			X	X				X	X						X	X
8					X	X			X											
9	X	X					X		X										X	X
10	X	X	X	X	X			X	X											
11	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 2 represents an individual (or individuals) from Annex 1 who had positive data for the following pathways: occupancy over grass, occupancy on water.

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

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3367/1/1	-	22.1	2.1	20.0	**22.4**	-	-	-	**6.0**	-	**2.5**	-	-	-	-	-	-	-	-	-	-	-
3367/2/1	-	22.1	2.1	20.0	**22.4**	-	-	-	**6.0**	-	**2.5**	-	-	-	-	-	-	-	-	-	-	-
3368/1/1	-	-	-	-	-	-	-	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/1	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/2	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/3	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/4	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/5	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/6	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/7	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/8	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/9	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/10	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/11	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/12	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/13	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/14	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/15	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/16	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/17	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/18	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/19	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3369/1/20	3.2	22.6	2.8	4.8	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3371/1/1	5.8	10.7	6.3	**33.6**	**17.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3371/2/1	5.8	-	6.3	**33.6**	**17.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3371/3/1	5.8	10.7	6.3	**33.6**	**17.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3371/4/1	5.8	10.7	6.3	**33.6**	**17.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3373/1/1	10.7	5.0	6.3	**23.8**	6.2	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3373/2/1	10.7	5.0	6.3	**23.8**	6.2	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3376/1/1	6.7	7.2	9.2	3.9	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3376/2/1	6.7	7.2	9.2	3.9	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3376/3/1	6.7	7.2	9.2	3.9	0.8	-	-	-	-	-	-	--	-	-	-	-	-	-	-	-	-	-
3376/4/1	6.7	7.2	9.2	3.9	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3379/1/1	**27.9**	22.1	3.1	10.5	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5431	914
3379/2/1	**27.9**	22.1	3.1	10.5	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3298	1206
3380/1/1	-	16.8	5.3	**60.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3385/1/1	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-
3385/2/1	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-
3386/1/1	-	-	-	-	4.3	**100.0**	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3386/2/1	-	-	-	-	4.3	**100.0**	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3386/3/1	-	-	-	-	4.3	**100.0**	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3387/1/1	-	-	-	-	-	-	-	-	-	**23.7**	-	-	-	-	-	-	-	-	-	-	-	-
3387/2/1	-	-	-	-	-	-	-	-	-	**23.7**	-	-	-	-	-	-	-	-	-	-	-	-
3391/1/1	5.7	6.3	-	-	-	-	-	**17.8**	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-
3391/2/1	5.7	6.3	-	-	-	-	-	**17.8**	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-
3393/1/1	3.5	9.6	0.04	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6883	1799
3393/2/1	3.5	9.6	0.04	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5364	599
3393/3/1	3.5	9.6	0.04	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6101	1799
3396/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8536	26
3396/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8496	65
3397/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6689	601

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3397/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8107	601
3398/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6312	1084
3398/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6619	1084
3400/1/1	**15.9**	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6298	1454
3401/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6782	393
3401/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7101	393
3402/1/1	5.5	1.7	-	3.0	2.3	-	-	8.9	-	0.5	-	-	-	-	-	-	-	-	-	-	7047	732
3402/2/1	5.5	1.7	-	3.0	2.3	-	-	8.9	-	0.5	-	-	-	-	-	-	-	-	-	-	7047	732
3403/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3404/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3405/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3405/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3405/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3405/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3406/1/1	**23.6**	**73.5**	**45.8**	-	**22.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3407/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3408/1/1	4.8	-	0.8	-	4.0	-	-	**27.7**	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-
3408/2/1	4.8	-	0.8	-	4.0	-	-	**27.7**	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-
3409/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	942	12
3409/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	942	12
3409/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/4/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3410/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1606	16
3410/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2008	20
3410/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2008	20
3410/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2008	20

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3410/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2008	20
3411/1/1	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-
3411/2/1	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-
3412/1/1	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-
3412/2/1	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-
3412/3/1	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-
3413/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3415/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6560	-	-	-	-
3415/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6560	-	-	-	-
3416/1/1	**33.2**	14.1	14.3	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3416/2/1	**33.2**	14.1	14.3	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3416/3/1	**33.2**	14.1	14.3	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/1/1	1.1	-	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/2/1	1.1	-	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/3/1	1.1	4.4	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/4/1	1.1	4.4	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/5/1	1.1	4.4	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3418/6/1	1.1	4.4	0.4	9.8	1.4	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3419/1/1	-	7.6	2.2	6.3	1.9	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
3419/2/1	-	7.6	2.2	6.3	1.9	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
3419/5/1	-	2.9	0.8	2.4	0.6	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3419/6/1	-	2.9	0.8	2.4	0.6	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3419/7/1	-	2.9	0.8	2.4	0.6	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3419/8/1	-	2.9	0.8	2.4	0.6	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3423/1/1	2.6	4.9	12.3	5.0	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3423/2/1	2.6	4.9	12.3	5.0	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3423/3/1	2.6	4.9	12.3	5.0	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3423/4/1	2.6	-	12.3	5.0	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/1/1	-	-	-	-	-	**91.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/2/1	-	-	-	-	-	**91.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/4/1	-	-	-	-	-	**91.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/5/1	-	-	-	-	-	**194.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/6/1	-	-	-	-	-	**194.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3424/9/1	-	-	-	-	-	**208.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3425/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8232	130
3426/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7508	627
3426/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6105	22
3427/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6840	1477
3430/1/1	**13.7**	-	8.7	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3430/2/1	**13.7**	2.5	8.7	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3433/1/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3433/2/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3433/3/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3435/1/1	**24.7**	25.6	**15.3**	1.4	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3435/2/1	**24.7**	25.6	**15.3**	1.4	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3438/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6372	561
3438/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7118	561
3438/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6001	141
3439/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6887	967
3439/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7040	967

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3439/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5777	-
3439/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5406	226
3440/1/1	5.5	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	6337	1736
3440/2/1	5.5	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	7848	548
3441/1/1	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	5536	732
3441/2/1	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	5641	732
3442/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8553	183
3443/1/1	3.8	5.1	1.1	10.1	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6386	1644
3443/2/1	3.8	5.1	1.1	10.1	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6386	1644
3445/1/1	6.4	22.0	3.0	5.0	0.8	-	-	**17.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3445/2/1	6.4	22.0	3.0	5.0	0.8	-	-	**17.8**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3454/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	336
3454/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	336
3454/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	336
3454/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3454/4/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	365
3455/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8147	200
3455/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6114	52
3455/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7845	78

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3459/1/1	-	-	-	-	-	-	**2.1**	8.9	-	4.5	-	-	-	-	-	-	-	-	-	-	-	-
3459/2/1	-	-	-	-	-	-	0.7	8.9	-	4.5	-	-	-	-	-	-	-	-	-	-	-	-
3460/1/1	-	-	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3460/2/1	-	-	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3460/3/1	-	-	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3461/1/1	-	-	-	-	-	-	**1.1**	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3461/2/1	-	-	-	-	-	-	**1.1**	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3462/1/1	**20.1**	-	**44.8**	5.0	-	-	-	-	**10.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
3462/2/1	**20.1**	-	**44.8**	5.0	-	-	-	-	**10.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
3463/1/1	4.5	-	**30.1**	7.0	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3463/2/1	4.5	-	**30.1**	7.0	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3463/3/1	4.5	-	**30.1**	7.0	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3465/1/1	**14.0**	-	7.3	-	0.6	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-
3465/2/1	**14.0**	-	7.3	-	0.6	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-
3467/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210	-	-	-	-
3467/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210	-	-	-	-
3467/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	-	-	-	-
3469/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7111	457
3469/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6433	496
3470/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7088	522
3473/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8190	101
3473/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8190	101
3473/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2313	548
3474/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7142	758
3474/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5705	758
3475/1/1	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7482	392
3475/2/1	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7977	209

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3476/1/1	-	-	1.3	-	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5551	1279
3476/2/1	-	-	1.3	-	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6617	1279
3476/3/1	-	-	1.3	-	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7540	548
3476/6/1	-	-	1.3	-	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5392	361
3477/1/1	-	**64.2**	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7170	627
3479/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8065	46
3479/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8180	92
3479/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2891	-
3480/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4478	1045
3480/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3724	1027
3481/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7977	548
3481/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8291	104
3481/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7977	548
3482/1/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	5762	365
3482/2/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	5762	365
3482/3/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	5762	365
3482/4/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	5762	365
3482/5/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	5762	365
3482/6/1	-	-	-	-	-	-	-	**9.9**	-	0.9	-	-	-	-	-	-	-	-	-	-	7561	365
3483/1/1	-	5.4	-	-	-	-	**1.4**	-	1.1	-	-	-	-	-	-	-	-	-	-	-	4675	618
3483/2/1	5.0	5.4	-	-	-	-	**1.4**	-	1.1	-	-	-	-	-	-	-	-	-	-	-	5405	308
3484/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2064	295
3484/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2064	295
3484/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2064	295
3484/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2064	295
3486/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3486/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/4/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3488/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2147	239
3488/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2147	239
3488/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2147	239
3488/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2147	239
3488/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859	95
3488/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859	95
3488/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859	95
3488/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	644	48
3488/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	644	48
3488/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	644	48
3490/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	110	-	-	-	-
3490/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
3490/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
3490/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
3490/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3490/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
3490/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
3491/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	-	-	-	-	-
3493/1/1	12.9	7.8	**25.1**	**25.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3493/2/1	12.9	7.8	**25.1**	**25.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3496/1/1	-	-	-	-	-	-	-	**29.7**	-	-	-	-	-	-	-	-	-	-	-	-	6779	1825
3496/2/1	-	-	-	-	-	-	-	**29.7**	-	-	-	-	-	-	-	-	-	-	-	-	7665	365
3496/3/1	-	-	-	-	-	-	-	**29.7**	-	-	-	-	-	-	-	-	-	-	-	-	7926	730
3496/4/1	-	-	-	-	-	-	-	**29.7**	-	-	-	-	-	-	-	-	-	-	-	-	7926	730
3497/1/1	-	-	-	1.1	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7986	457
3498/1/1	**21.2**	22.1	**32.5**	**23.5**	**38.9**	-	-	-	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
3498/2/1	**21.2**	22.1	**32.5**	**23.5**	**38.9**	-	-	-	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
3498/3/1	0.9	0.9	1.4	1.0	1.7	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3499/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-
3499/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-
3500/1/1	12.3	11.7	1.2	11.3	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3500/2/1	12.3	11.7	1.2	11.3	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3501/1/1	**18.4**	15.4	7.6	0.8	3.9	-	-	**11.8**	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3501/2/1	**18.4**	15.4	7.6	0.8	3.9	-	-	**11.8**	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3501/3/1	**18.4**	15.4	7.6	0.8	3.9	-	-	**11.8**	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3501/4/1	**18.4**	15.4	7.6	0.8	3.9	-	-	**11.8**	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3501/8/1	**18.4**	15.4	7.6	0.8	3.9	-	-	**11.8**	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3502/1/1	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7622	351
3502/2/1	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6405	366
3503/1/1	12.7	3.0	7.7	-	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6236	1189
3503/2/1	12.7	3.0	7.7	-	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6437	549
3504/1/1	**39.1**	18.9	10.9	10.1	0.2	-	-	-	0.7	-	0.4	-	-	-	-	-	-	-	-	-	6205	1095

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3505/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
3506/1/1	**15.6**	9.7	**20.7**	7.5	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3506/2/1	**15.6**	9.7	**20.7**	7.5	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3507/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-
3507/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-
3507/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-	-
3507/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-	-
3508/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-
3508/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-
3509/1/1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6795	631
3509/2/1	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7089	337
3510/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7455	522
3510/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2920	-
3510/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4406	183
3512/1/1	-	-	-	-	2.0	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	5414	1421
3512/2/1	-	-	-	-	2.0	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	5024	1238
3512/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6552	61
3513/1/1	1.6	20.5	11.5	4.4	**28.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3513/2/1	1.6	20.5	11.5	4.4	**28.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3514/1/1	**17.9**	5.1	1.0	-	0.9	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	6884	487
3514/2/1	**17.9**	5.1	1.0	-	0.9	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	7049	598
3645/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1620**	**1437**	-	966	-	-	-	-
3646/1/1	**40.8**	**79.7**	5.0	**22.2**	**26.8**	-	-	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3646/2/1	**40.8**	**79.7**	5.0	**22.2**	**26.8**	-	-	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3651/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1995	-
3651/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1995	-
3651/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1995	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3651/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1995	-
3651/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1995	-
3651/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	581	-
3652/1/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	912
3652/2/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	-
3652/3/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	-
3652/4/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	-
3652/5/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	-
3652/6/1	**15.9**	12.0	3.3	16.7	-	-	**0.9**	**11.7**	-	-	-	0.3	6.7	-	-	-	-	-	-	-	-	-
3652/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1825
3654/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3654/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3654/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3654/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3655/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1757	-
3655/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1406	-
3655/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Wild fungi	Venison	Goat meat	Occupancy over grass (river washed)	Occupancy over mud (river washed)	Handling fishing gear	Occupancy in water	Occupancy on water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3655/3/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3655/3/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-
3657/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1479	286
3657/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1765	-
3657/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1479	286
3657/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	811	-
3657/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	811	-
3657/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	811	-

Notes

Emboldened observations are the high-rate individuals

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Aldermaston and Burghfield area

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Occupancy in water	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3391/3/1	5.7	**6.3**	-	-	-	-	-	**17.8**	-	0.3	-	-	-
3401/3/1	-	-	-	-	-	-	-	-	-	-	-	5750	393
3412/4/1	-	-	-	-	-	-	-	-	-	**1.0**	-	-	-
3419/3/1	-	2.2	0.6	1.8	0.5	-	-	-	0.04	-	-	-	-
3424/3/1	-	-	-	-	-	**91.3**	-	-	-	-	-	-	-
3424/7/1	-	-	-	-	-	**146.0**	-	-	-	-	-	-	-
3424/8/1	-	-	-	-	-	**194.7**	-	-	-	-	-	-	-
3424/10/1	-	-	-	-	-	**156.4**	-	-	-	-	-	-	-
3433/4/1	2.7	**17.9**	**7.4**	**11.9**	**10.5**	-	-	-	-	-	-	-	-
3435/3/1	-	-	-	-	**11.9**	-	-	-	-	-	-	-	-
3439/4/1	-	-	-	-	-	-	-	-	-	-	-	7252	104
3439/6/1	-	-	-	-	-	-	-	-	-	-	-	6273	104
3441/4/1	-	-	-	-	-	-	-	0.9	-	-	-	4774	732
3461/3/1	-	-	-	-	-	-	**1.1**	4.5	-	-	-	-	-
3461/4/1	-	-	-	-	-	-	**1.1**	4.5	-	-	-	-	-
3469/3/1	-	-	-	-	-	-	-	-	-	-	-	5486	457

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Occupancy in water	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3479/4/1	-	-	-	-	-	-	-	-	-	-	-	6621	25
3491/2/1	-	-	-	-	-	-	-	-	-	-	57	-	-
3501/6/1	**18.4**	**15.4**	**7.6**	0.8	3.9	-	-	**11.8**	**0.7**	-	-	-	-
3501/7/1	**18.4**	**15.4**	**7.6**	0.8	3.9	-	-	**11.8**	**0.7**	-	-	-	-
3502/3/1	-	-	-	-	1.5	-	-	-	-	-	-	6424	-
3502/4/1	-	-	-	-	1.5	-	-	-	-	-	-	6424	-
3507/5/1	-	-	-	-	-	-	-	-	-	-	36	-	-
3507/6/1	-	-	-	-	-	-	-	-	-	-	36	-	-
3513/3/1	1.2	**15.4**	**8.6**	3.3	**21.7**	-	-	-	-	-	-	-	-
3513/4/1	1.2	**15.4**	**8.6**	3.3	**21.7**	-	-	-	-	-	-	-	-
3513/5/1	1.2	**15.4**	**8.6**	3.3	**21.7**	-	-	-	-	-	-	-	-

Notes

Emboldened observations are the high-rate individuals

Annex 3. Infants' consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Aldermaston and Burghfield area

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Occupancy in water	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3393/4/1	0.9	2.4	0.01	-	0.1	-	-	-	-	-	-	6883	1799
3393/5/1	1.7	**4.8**	0.02	-	0.3	-	-	-	-	-	-	5710	1799
3397/3/1	-	-	-	-	-	-	-	-	-	-	-	7145	601
3401/4/1	-	-	-	-	-	-	-	-	-	-	-	7199	393
3419/4/1	-	1.5	0.4	**1.2**	0.3	-	-	-	0.03	-	-	-	-
3441/3/1	-	-	-	-	-	-	-	0.6	-	-	-	4774	732
3475/3/1	-	-	-	-	2.0	-	-	-	-	-	-	573	52
3476/4/1	-	-	-	-	1.6	-	-	-	-	-	-	6125	1096
3476/5/1	-	-	-	-	1.2	-	-	-	-	-	-	6125	1096
3491/3/1	-	-	-	-	-	-	-	-	-	-	57	-	-
3498/4/1	0.9	0.9	**1.4**	**1.0**	1.7	-	-	-	0.1	-	-	-	-
3498/5/1	0.9	0.9	**1.4**	**1.0**	1.7	-	-	-	0.1	-	-	-	-
3501/5/1	**9.2**	**7.7**	**3.8**	0.4	1.9	-	-	**5.9**	**0.3**	-	-	-	-
3513/6/1	0.5	**6.8**	**3.8**	**1.5**	**9.5**	-	-	-	-	-	-	-	-
3514/3/1	**8.9**	2.5	0.5	-	0.5	-	-	-	**0.2**	-	-	6348	30

Notes

Emboldened observations are the high-rate individuals

Annex 4. Qualitative and estimated data for use in dose assessments

Details of activity	Exposure pathways involved	Estimated rate
Consumption of food originating from the aquatic survey area	Consumption of coarse fish	1 kg y^{-1}

Annex 5. 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 aquatic substrates[b]	0.500	0.030

Notes

[a]Excepting notes b and c, consumption ratios were derived from Byrom and others (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 6. Consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age[a] in the Aldermaston and Burghfield area

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Venison	Goat meat	Occupancy in water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3379/1/1	27.9	22.1	3.1	10.5	0.8	-	-	-	-	-	-	-	-	-	-	5431	914
3393/1/1	3.5	9.6	0.0	-	0.6	-	-	-	-	-	-	-	-	-	-	6883	1799
3396/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8496	65
3397/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6689	601
3401/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7101	393
3403/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3403/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Venison	Goat meat	Occupancy in water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3403/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1902	24
3404/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3404/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2266	24
3405/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3405/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3405/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2742	20
3406/1/1	23.6	73.5	45.8	-	22.4	-	-	-	-	-	-	-	-	-	-	-	-
3407/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2007	21
3407/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3407/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655	4
3409/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	942	12
3409/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Venison	Goat meat	Occupancy in water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3409/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3409/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1889	20
3410/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1606	16
3410/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2008	20
3413/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3413/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	208	52	-	-
3423/3/1	2.6	4.9	12.3	5.0	6.5	-	-	-	-	-	-	-	-	-	-	-	-
3424/6/1	-	-	-	-	-	194.7	-	-	-	-	-	-	-	-	-	-	-
3430/1/1	13.7	2.5	8.7	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-
3433/2/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-
3433/3/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-
3433/4/1	2.7	17.9	7.4	11.9	10.5	-	-	-	-	-	-	-	-	-	-	-	-
3435/2/1	24.7	25.6	15.3	1.4	11.9	-	-	-	-	-	-	-	-	-	-	-	-
3441/1/1	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	5536	732

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Venison	Goat meat	Occupancy in water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3469/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7111	457
3473/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2313	548
3476/6/1	-	-	1.3	-	4.9	-	-	-	-	-	-	-	-	-	-	5392	361
3479/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2891	-
3482/3/1	-	-	-	-	-	-	-	9.9	-	0.9	-	-	-	-	-	5762	365
3482/4/1	-	-	-	-	-	-	-	9.9	-	0.9	-	-	-	-	-	5762	365
3486/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1670	239
3486/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3486/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429	239
3488/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859	95
3498/3/1	0.9	0.9	1.4	1.0	1.7	-	-	-	0.1	-	-	-	-	-	-	-	-
3499/2/1	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-
3507/2/1	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-
3507/4/1	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-

Person ID number	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Honey	Venison	Goat meat	Occupancy in water	Occupancy in close proximity (<10 m) to liquid sewage sludge	Occupancy in close proximity (<10 m) to dried sewage sludge	Indoor occupancy within 1 km of the nuclear licensed site boundary	Outdoor occupancy within 1 km of the nuclear licensed site boundary
3508/1/1	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-
3508/2/1	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-
3514/1/1	17.9	5.1	1.0	-	0.9	-	-	-	0.3	-	-	-	-	-	-	6884	487
3651/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	581	-
3652/3/1	15.9	12.0	3.3	16.7	-	-	0.9	11.7	-	-	0.3	6.7	-	-	-	-	-
3652/4/1	15.9	12.0	3.3	16.7	-	-	0.9	11.7	-	-	0.3	6.7	-	-	-	-	-
3652/5/1	15.9	12.0	3.3	16.7	-	-	0.9	11.7	-	-	0.3	6.7	-	-	-	-	-
3654/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2290	-
3654/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3654/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	835	-
3655/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1757	-
3655/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1406	-

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 7. Summary of profiles for adults in the Aldermaston and Burghfield area for use in the assessment of total dose

Profile Name	Pathway Name	Number of Individuals		Direct	Eggs	Fish - River	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Riverbank	Honey	Meat - Game	Meat - Poultry	Meat – Goat meat	Milk	Mushrooms	Occupancy in proximity to sewage sludge	Occupancy in proximity to sewage cake biosolids	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	1		2			3		4					5	5			6	6	6				
			Units	-	kg	kg	kg	kg	h	kg	kg	kg	kg	l	kg	h	h	h	h	h	h	h	kg	kg	kg	kg
Occupants for Direct Radiation		213		**1.00**	1.3	-	0.32	0.03	-	0.03	<0.01	0.04	0.19	-	<0.01	-	-	-	-	880	450	2440	1.5	1.3	0.74	0.29
Egg Consumers		27		0.59	**16.1**	-	1.1	0.13	-	0.63	0.07	0.20	1.5	-	-	-	-	-	-	1290	-	1430	8.2	7.6	4.2	2.4
Consumers of Fish - River		2		-	-	**1.0**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic Fruit Consumers		13		-	-	-	**25.2**	1.6	-	-	-	-	-	-	0.38	-	-	-	-	-	-	-	13.4	30.4	21.1	13.3
Wild Fruit and Nut Consumers		4		-	-	-	11.2	**8.0**	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	10.1	11.1	12.5	23.5
Occupants over Riverbank		1		-	-	-	-	-	**1620**	-	-	-	-	-	-	-	-	-	970	-	-	-	-	-	-	-
Honey Consumers		2		-	-	-	-	-	-	**23.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Game Meat Consumers		6		1.00	11.7	-	-	-	-	-	**0.33**	0.90	6.7	-	-	-	-	-	-	150	-	-	15.9	12.0	16.7	3.3
Poultry Meat Consumers		12		0.67	8.1	-	-	0.19	-	0.76	0.17	**1.1**	3.3	-	-	-	-	-	-	76	-	920	8.4	6.9	8.3	1.7
Sheep Meat Consumers		6		1.00	11.7	-	-	-	-	-	0.33	0.90	**6.7**	-	-	-	-	-	-	150	-	-	15.9	12.0	16.7	3.3
Milk Consumers		9		-	-	-	1.4	0.56	-	-	-	-	-	**130.2**	-	-	-	-	-	-	-	-	-	-	-	-
Mushroom Consumers		2		-	-	-	22.4	6.0	-	-	-	-	-	-	**2.5**	-	-	-	-	-	-	-	-	22.1	20.0	2.1
Occupancy in Proximity to Sewage Sludge		5		-	-	-	-	-	-	-	-	-	-	-	-	**210**	52	-	-	-	-	-	-	-	-	-
Occupancy in Proximity to Sewage Cake Biosolids		5		-	-	-	-	-	-	-	-	-	-	-	-	210	**52**	-	-	-	-	-	-	-	-	-
Occupants In Water		5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	**35**	-	-	-	-	-	-	-	-
Occupants On Water		2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**6560**	-	-	-	-	-	-	-
Local Inhabitants (0 - 0.25 km)		19		1.00	6.3	-	0.14	-	-	-	-	-	-	-	-	-	-	-	-	**8010**	-	-	0.55	1.5	0.06	<0.01
Local Inhabitants (0.25 - 0.5 km)		8		1.00	-	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	**7410**	-	5.2	1.6	-	1.9
Local Inhabitants (0.5 - 1 km)		59		1.00	1.4	-	0.76	0.09	-	0.11	-	0.05	-	-	<0.01	-	-	-	-	-	-	**7030**	2.9	2.7	0.97	0.44
Green Vegetable Consumers		35		0.34	3.7	-	6.2	1.1	-	-	0.06	0.15	1.1	-	0.01	-	-	-	-	26	220	950	**21.6**	17.8	7.3	12.4
Other Domestic Vegetable Consumers		4		0.25	-	-	19.2	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1950	26.3	**74.3**	11.1	13.9
Potato Consumers		13		-	-	-	16.5	0.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.9	21.4	**29.6**	13.0
Root Vegetable Consumers		14		-	-	-	10.3	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.1	14.6	10.4	**29.5**

Notes

1) Direct radiation is expressed as proportion of group who are present within 1 km of nuclear licensed site boundary
2) 1 kg of freshwater fish consumption is assumed for theoretical river occupants to account for uncertainty in habits survey methodology (Annex 4)
3) Gamma ext (external gamma) - Riverbank represents occupancy over river washed substrates along the River Kennet, the Kennet and Avon Canal and other waterways included in the aquatic survey area
4) Meat – Game includes venison
5) Workers at the Silchester Sewage Treatment Works
6) 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 emboldened on the diagonal

Annex 8. Summary of profiles for the child age group (6 - 15 years old) in the Aldermaston and Burghfield area for use in the assessment of total dose

Profile Name	Pathway Name	Number of Individuals	Notes	Direct [1]	Eggs	Fruit - Domestic	Fruit and nuts - Wild	Honey	Meat - Poultry	Milk	Occupancy IN water	Plume (IN; 0-0.25 km) [2]	Plume (MID; 0.25-0.5 km) [2]	Plume (OUT; 0.5-1 km) [2]	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
			Units	-	kg	kg	kg	kg	kg	l	h	h	h	h	kg	kg	kg	kg
Occupants for Direct Radiation		8		**1.00**	0.12	0.38	-	-	-	-	-	830	770	4750	-	-	-	-
Egg Consumers		3		-	**13.8**	2.6	0.45	0.10	-	-	-	-	-	-	14.2	12.3	0.56	5.1
Domestic Fruit Consumers		5		-	-	**17.5**	-	-	-	-	-	-	-	-	1.3	12.8	4.4	6.7
Wild Fruit and Nut Consumers		2		-	11.8	3.9	**0.68**	-	-	-	-	-	-	-	18.4	15.4	0.85	7.6
Honey Consumers		1		-	-	-	-	**1.0**	-	-	-	-	-	-	-	-	-	-
Poultry Meat Consumers		2		-	4.5	-	-	-	**1.1**	-	-	-	-	-	-	-	-	-
Milk Consumers		4		-	-	-	-	-	-	**147.1**	-	-	-	-	-	-	-	-
Occupants In Water		3		-	-	-	-	-	-	-	**43**	-	-	-	-	-	-	-
Local Inhabitants (0 - 0.25 km)		1		1.00	-	-	-	-	-	-	-	**6650**	-	-	-	-	-	-
Local Inhabitants (0.25 - 0.5 km)		1		1.00	-	-	-	-	-	-	-	-	**6140**	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)		6		1.00	0.16	0.50	-	-	-	-	-	-	-	**6340**	-	-	-	-
Green Vegetable Consumers		2		-	11.8	3.9	0.68	-	-	-	-	-	-	-	**18.4**	15.4	0.85	7.6
Other Domestic Vegetable Consumers		7		-	5.9	11.9	0.19	0.04	-	-	-	-	-	-	7.0	**14.5**	3.4	6.9
Potato Consumers		1		-	-	10.5	-	-	-	-	-	-	-	-	2.7	17.9	**11.9**	7.4
Root Vegetable Consumers		6		-	3.9	13.9	0.23	-	-	-	-	-	-	-	7.2	15.8	3.9	**8.1**

Notes

1) Direct radiation is expressed as proportion of group who are present within 1 km of nuclear licensed site boundary
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 emboldened on the diagonal

Annex 9. Summary of profiles for the infant age group (0 - 5 years old) in the Aldermaston and Burghfield area for use in the assessment of total dose

Profile Name	Pathway Name	Number of Individuals	Notes	Direct 1	Eggs	Fruit - Domestic	Fruit and nuts - Wild	Occupancy IN water	Plume (IN; 0-0.25 km) 2	Plume (MID; 0.25-0.5 km) 2	Plume (OUT; 0.5-1 km) 2	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
			Units	-	kg	kg	kg	h	h	h	h	kg	kg	kg	kg
Occupants for Direct Radiation		9		**1.00**	0.07	0.64	0.02	-	2660	840	2990	1.3	1.1	-	0.06
Egg Consumers		1		-	**5.9**	1.9	0.34	-	-	-	-	9.2	7.7	0.42	3.8
Domestic Fruit Consumers		1		-	-	**9.5**	-	-	-	-	-	0.53	6.8	1.5	3.8
Wild Fruit and Nut Consumers		2		0.50	2.9	1.2	**0.25**	-	-	-	3190	9.1	5.1	0.21	2.1
Occupants In Water		1		-	-	-	-	**57**	-	-	-	-	-	-	-
Local Inhabitants (0 - 0.25 km)		3		1.00	-	0.15	-	-	**7980**	-	-	0.87	2.4	-	0.01
Local Inhabitants (0.25 - 0.5 km)		1		1.00	-	-	-	-	-	**7590**	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)		4		1.00	0.16	0.83	0.04	-	-	-	**6580**	2.2	0.63	-	0.12
Green Vegetable Consumers		2		0.50	2.9	1.2	0.25	-	-	-	3190	**9.1**	5.1	0.21	2.1
Other Domestic Vegetable Consumers		3		0.33	2.0	3.9	0.11	-	2500	-	-	3.8	**6.4**	0.63	2.5
Potato Consumers		4		-	-	3.3	0.06	-	-	-	-	0.58	2.5	**1.2**	1.7
Root Vegetable Consumers		4		-	1.5	3.7	0.14	-	-	-	-	2.9	4.1	0.97	**2.6**

Notes

1) Direct radiation is expressed as proportion of group who are present within 1 km of nuclear licensed site boundary
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 emboldened on the diagonal

Annex 10. Summary of profiles for women of childbearing age[a] in the Aldermaston and Burghfield area, for use in assessments of total dose to prenatal children

Profile Name	Pathway Name	Number of Individuals	Notes	Direct	Eggs	Fish - River	Fruit - Domestic	Fruit and nuts - Wild	Honey	Meat - Game	Meat - Poultry	Meat – Goat meat	Milk	Occupancy in proximity to sewage sludge	Occupancy in proximity to sewage cake biosolids	Occupancy IN 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	1		2				3				4	4		5	5	5				
			Units	-	kg	kg	kg	kg	kg	kg	kg	kg	l	h	h	h	h	h	h	kg	kg	kg	kg
Occupants for Direct Radiation		63		**1.00**	0.89	-	0.11	<0.01	0.03	0.02	0.04	0.32	-	-	-	-	850	430	1320	1.5	1.2	0.96	0.24
Egg Consumers		5		1.00	**11.0**	-	-	-	0.36	0.20	0.54	4.0	-	-	-	-	-	-	2450	9.5	7.2	10.0	2.0
Consumers of Fish - River		2		-	-	**1.0**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic Fruit Consumers		5		-	-	-	**13.2**	-	-	-	-	-	-	-	-	-	-	-	-	11.3	30.6	7.4	16.7
Wild Fruit and Nut Consumers		1		1.00	-	-	0.92	**0.32**	-	-	-	-	-	-	-	-	-	-	7370	17.9	5.1	-	0.96
Honey Consumers		2		1.00	9.9	-	-	-	**0.91**	-	-	-	-	-	-	-	-	-	6130	-	-	-	-
Game Meat Consumers		3		1.00	11.7	-	-	-	-	**0.33**	0.90	6.7	-	-	-	-	-	-	-	15.9	12.0	16.7	3.3
Poultry Meat Consumers		3		1.00	11.7	-	-	-	-	0.33	**0.90**	6.7	-	-	-	-	-	-	-	15.9	12.0	16.7	3.3
Sheep Meat Consumers		3		1.00	11.7	-	-	-	-	0.33	0.90	**6.7**	-	-	-	-	-	-	-	15.9	12.0	16.7	3.3
Milk Consumers		1		-	-	-	-	-	-	-	-	-	**194.7**	-	-	-	-	-	-	-	-	-	-
Occupancy in Proximity to Sewage Sludge		5		-	-	-	-	-	-	-	-	-	-	**210**	52	-	-	-	-	-	-	-	-
Occupancy in Proximity to Sewage Cake Biosolids		5		-	-	-	-	-	-	-	-	-	-	210	**52**	-	-	-	-	-	-	-	-
Occupants In Water		2		-	-	-	-	-	-	-	-	-	-	-	-	**30**	-	-	-	-	-	-	-
Local Inhabitants (0 - 0.25 km)		3		1.00	-	-	0.20	-	-	-	-	-	-	-	-	-	**8180**	-	-	1.2	3.2	-	0.01
Local Inhabitants (0.25 - 0.5 km)		4		1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	**3950**	-	-	-	-	-
Local Inhabitants (0.5 - 1 km)		8		1.00	2.6	-	0.83	0.04	0.23	-	-	-	-	-	-	-	-	-	**6050**	5.7	3.4	1.3	0.67
Green Vegetable Consumers		8		0.63	4.4	-	4.8	0.04	-	0.13	0.34	2.5	-	-	-	-	-	-	1710	**19.4**	20.6	7.7	10.5
Other Domestic Vegetable Consumers		2		-	-	-	17.2	-	-	-	-	-	-	-	-	-	-	-	-	24.1	**49.5**	0.68	30.5
Potato Consumers		7		0.57	5.0	-	4.6	-	-	0.14	0.39	2.9	-	-	-	-	-	-	910	11.9	16.0	**13.8**	5.1
Root Vegetable Consumers		2		-	-	-	17.2	-	-	-	-	-	-	-	-	-	-	-	-	24.1	49.5	0.68	**30.5**

Notes

1) Direct radiation is expressed as proportion of group who are present within 1 km of nuclear licensed site boundary
2) Fish – River includes 1 kg of freshwater fish consumption is assumed for theoretical river occupants to account for uncertainty in habits survey methodology (Annex 4)
3) Meat – Game includes venison
4) Occupancy in proximity to sewage refers to workers at the Sewage Treatment Works
5) 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 emboldened on the diagonal
[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

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