# Longis Nature Reserve Annual Action Plan 2023

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### **Executive Summary**

As a multi-habitat, species-rich site, Longis Nature Reserve requires a dynamic and bespoke action plan which can be easily adapted according to changing environmental demands. Longis provides important social and environmental services for the island; as a popular recreational area for residents and visitors, alongside the mosaic of habitats found here which are vital for a large number of species. Our action plan has been designed to balance the needs of these different entities, and to meet the objectives set out in the Longis Reserve Management Plan 2017-2021 (Manzano-Rubio and Whyte, 2017). The Management Plan was ratified by the General Services Committee (GSC) of the States of Alderney (SoA) in 2017 and requires the production of an Annual Action Plan and Review. This Action Plan is informed by the key objectives of the 2022 Review.

Due to the pressures brought about by the Covid Pandemic in 2020-21 it was necessary to role forward the Management Plan 2017-21 into 2022, with the commitment to complete the development of a new 5 year strategy for public consultation and SoA ratification before the end of 2022. As of April 2023, this has yet to be done, so for this Action Plan, we are continuing the 2017-21 Management Plan.

### Background

The Longis Reserve (Figure 1) is Alderney's oldest Nature Reserve established in 2003 under a Memorandum of Understandings and agreements between the Alderney Wildlife Trust (AWT), the SoA and several private landowners. The AWT manages the site for the purpose of wildlife conservation while ensuring that the established public use of the site is not affected.



Figure 1 Boundaries of Longis Reserve

The Reserve covers around 80ha at the eastern end of the island. It contains fifteen different terrestrial habitats and forty-nine marine biotopes. Two freshwater ponds provide key habitats for some of Alderney's flagship species and the coastal areas and common are important areas for Alderney Sea-Lavender, Sand Crocus, and the Glanville Fritillary. The reserve as a whole is a crucial refuge for breeding and wintering birds.

It also encompasses significant historical features including numerous bunkers and other German and Victorian fortifications. Longis Common is the site of numerous Bronze Age and Roman artefacts which are part of the rich cultural history of Alderney's landscape.

### **Aims and Objectives**

The Longis Reserve Management Plan (LRMP) (Manzano-Rubio and Whyte, 2017) is the primary management tool defining the main aims guiding the long-term management of the Longis Reserve. The specific guidance for 2022 will be further informed by the 2021 Action Plan (Harper, 2021) and Review (Harper, 2021).

AIM 1: To increase the knowledge about the natural value of the Longis Reserve and its importance within both local and international context.

AIM 2: To conserve the natural value of the Longis Reserve by preserving the diverse range of habitats and species.

AIM 3: To advance the education of the public about the natural value of the Longis Reserve and promote a sustainable recreational use of it.

Within each of the main aims laid out in the LRMP, there are a series of key objectives. To work towards these objectives (listed below), a series of actions will be undertaken in 2022.

**Objective 1.1** To update existing data about the size and condition of the important habitats of the Longis Reserve.

**Objective 1.2** To update existing data about the breeding status and presence of the important species of the Longis Reserve.

**Objective 1.3** To promote scientific research in the Longis Reserve's ecological features, and ensure the results of this research are available to the wider community.

**Objective 2.1** To maintain the current size, plant communities and species richness of dune grasslands and coastal grasslands present within the Longis Reserve.

**Objective 2.2** To maintain an appropriate balance of tree and shrub cover in the area surrounding Longis Pond, whilst maintaining, and if possible increasing, the current size and species richness of open water and reedbed, allowing and encouraging their natural expansion into adjacent grasslands.

**Objective 2.3** To develop Mannez Pond's surrounding vegetation into a wet woodland whilst maintaining the current size and species richness of open water.

**Objective 2.4** To maintain the current size and species richness of Houmet Herbé's heathland.

**Objective 2.5** To maintain existing Mannez scrub in a favourable status for breeding Dartford Warblers.

**Objective 2.6** To maintain the current size, plant community and species richness of Longis open dune.

**Objective 2.7** To maintain the current habitat and species richness of the Longis Reserve's marine environment.

**Objective 3.1** To maintain the current level of access and its condition.

**Objective 3.2** To increase on-site signage about boundaries, features and management of the Longis Reserve whilst maintaining visual impact to a minimum.

**Objective 3.3** To maintain and if possible, enhance the existing infrastructure i.e. Longis and Mannez bird hide facilities.

**Objective 3.4** To involve the community in regular events and activities.

### Actions

A Gantt chart detailing the timetable of works is presented in Appendix 1.

#### 1. Ecological surveying and monitoring

**Objective 1.1** seeks to update the existing data about the size and condition of the important habitats of the Longis reserve. To achieve this the following actions are proposed for 2023:

#### Action 1.1.1 Phase 1 Surveys

The most recent Phase 1 Habitat Survey of Longis reserve was carried out in 2019. We have set the intention of conducting another survey in 2022. This is to allow for the identification of changes in habitat types within the reserve and to evaluate the impacts of conservation action and the Alderney Grazing Animals Project (AGAP).

Actions for 2023:

- Compare the results from vegetation surveys to identify changes in habitat types and to inform where conservation actions such as scrub control and increased grazing are particularly necessary.
- Compare the updated maps to previous versions to assess land use changes and the success of management actions.
- Use updated map to evaluate the AGAP strategy.

#### Action 1.2.1 Reedbed monitoring

Systematically monitoring the health of Longis reedbed and the species diversity within it is important for informing the long term management strategy of the area. As of 2019 a standardised reedbed monitoring plan has been implemented (Sydanmaa, 2019).

Actions for 2023:

- Complete reedbed monitoring transects at the highest (February) and lowest (August) water levels of the year.
- Continue to use ArcGIS online and Field Maps to inform survey locations.
- Perform analysis of reedbed data to establish whether current management is appropriate Action 1.2.2 Bat monitoring

#### Action 1.2.2 Bat monitoring

There is already an established bat monitoring route through the reserve (Fig. 1), set up following the National Bat Monitoring Programme (NBMP) guidelines and methodologies (Appendix 2). The Bailiwick Bat Survey was also established in 2021, spanning until 2024. This has increased the scale and accuracy of bat recording within the site. The following survey squares fall within the site:



Figure 2: Survey squares for the Bailiwick Bat Survey which fall within the Reserve.

Actions for 2023:

- Complete NBMP surveys twice in July, following established route and methodology.
- Ensure that all Bailiwick bat survey squares are completed for both parts of the survey season.
- Ensure that all interesting recordings and analysis output is stored within the biological records centre server.
- Ensure the survey data is available to the public by sharing it with the Alderney Biodiversity Centre.

#### Action 1.2.3 Butterfly monitoring

There is already a UK Butterfly Monitoring Scheme (UKBMS) transect located in the reserve (Fig. 3) and this is monitored annually following a set methodology (Appendix 3). Butterfly surveys were largely successfully completed throughout 2022.

- Continue with the established UKBMS survey effort, ensuring surveys are performed on most appropriate weather days.
- Ensure all 2023 data is uploaded to the UKBMS portal by end of October. Download outputs to AWT master Butterfly survey excel sheets.



Figure 3. National Bat Monitoring Program (NBMP) and UK Butterfly Monitoring Scheme (UKBMS) transects within Longis Reserve.

#### Action 1.2.4 (a) Bee monitoring

A bee monitoring plan was established in 2017 following the already established UKBMS transects (Figure 8) in 5 key locations across Alderney, with one of them passing through Longis reserve (Appendix 4). The Bumblebee Conservation Trust has now enabled transect data to be uploaded to their web portal and no longer requires paper copies be scanned and sent.

Actions for 2023:

- Liaise with The Bumblebee Conservation Trust regarding upload of data. Assuming this is possible, set up the Alderney survey routes on the site and input all data.
- Train a desk volunteer to upload historic data to the BCT portal.
- Continue bee surveys in the reserve as part of the island wide effort, liaising with the Bumblebee Conservation Trust
- Continue to examine the historical data to determine if any trends are present for the abundance of Bee species within Longis reserve.
- Use findings from monitoring data to review management practices on the reserve.

#### Action 1.2.4 (b) Moth monitoring

Moths are key pollinators and should be surveyed alongside bees and butterflies. The AWT runs a moth trap at Essex Farm, and it would be worth assessing the diversity and abundance of moths inhabiting the Longis Nature Reserve, particularly in light of the ongoing Alderney Grazing Animal Project operating across the reserve. See Appendix 5 for Garden Moth Scheme methodology.

- Ensure that the AWT continues to participate in the scheme.
- Begin survey effort from 5<sup>th</sup> March through to 5<sup>th</sup> of November, ensuring all records are submitted to the Garden Moth Scheme regional coordinator.

#### Action 1.2.5 Dragonflies and damselflies

Historically Mannez pond has experienced the most diverse range of dragonfly species of any site on the island, housing many of Alderney's 16 species. After 3 years of failure to maintain areas of open water within the pond a survey of dragonflies was conducted in 2019. In 2020, 5 species of dragonfly and three species of damselfly were recorded on Longis Pond. Four species of dragonfly were recorded on Mannez pond but no damselfly species were seen. The results from 2021 are

slightly more negative than the previous year's; 3 species were recorded from Longis Bird Hide (2 dragonfly and 1 damselfly), and 3 from Mannez (2 dragonfly and 1 damselfly).

Actions for 2023:

- Ensure that open water extent increases in both ponds, but especially Mannez, to recover the overall invertebrate and Odonata diversity.
- Cut and/or pull vegetation, including lesser reedmace from the areas defined in action 2.2.6 during the winter of 2022/23
- Examine how the survey technique could be improved by conducting a literature review of Odonata survey techniques.
- If the current survey method is deemed adequate, conduct 5 x 30-minute point counts at the ponds at the following times of year: late May, June, July, August and early September. These point counts MUST be carried out during sunny, calm and dry weather conditions.
- Ensure the survey data is available to the public by sharing it with the Alderney Biodiversity Centre.

#### Action 1.2.6 Amphibians and Reptiles

Talks began in 2020 between Guernsey Biological Records Centre (GRBC) and the Amphibian & Reptile Conservation (ARC) Trust aiming to expand the National Amphibian and Reptile Recording Scheme (NARRS) to the Bailiwick, similar to Jersey's JARRS. The aim is to create a Bailiwick atlas of herpetological fauna. Talks in early 2021 between GRBC, ARC and AWT led to agreement that the scheme would be named the Guernsey and Alderney Amphibian and Reptile Recording Scheme (GAARRS),

Actions for 2023:

• Continue to follow developments of GAARRS (Guernsey and Alderney Amphibian and Reptile Recording Scheme)

#### Action 1.2.7 Bird Surveys

A variety of bird surveys have been conducted on Longis Reserve due to the high presence of important species such as Water Rail. There has been sporadic participation in the BTO Breeding Birds Survey (BBS) on the reserve historically. Common Bird Census (CBC) methodology may act as a more accurate measure of the breeding birds on Longis Reserve but requires additional surveying effort of more elusive species. This is being suspended this year pending review.

Actions for 2023:

• Suspending pending review in/for 2024

#### Water rail census

Suspending this year pending 3-year review in 2024

#### Action 1.2.8 Marine and intertidal surveys

The Longis Reserve boundary extends into the low water mark of Longis Bay which contains 49 marine biotypes. For the Longis Reserve Management Plan 2017-2021, a series of marine and intertidal habitat mapping exercises, intertidal species assessments and supporting citizen science projects (such as Seasearch dive/scuba surveys) were laid out. These surveys were developed to link and feed into the AWT Living Seas Programme. The most recent Intertidal habitat mapping survey of Longis Bay was completed in 2021.

#### Actions for 2023:

- Continuation of the intertidal surveys and citizen science projects, such as Seasearch and TWT Shoresearch.
- Continue long-term monitoring of the Eelgrass (*Zostera marina*) bed within Longis Bay, linked to the Bailiwick Eelgrass Exploration Project.
- Consider implementing existing and new complementary survey techniques, such as baited underwater video surveys (BRUV) and planktonscope surveys.

#### Action 1.2.9 Scaly Crickets

Scaly crickets (*Pseudomogoplistes squamiger*) were discovered in Alderney in 2020. Survey methodology for this species is simple and not time sensitive and consists of burying a small trap (e.g. a cup with holes perforated in the bottom) in suitable habitat, baiting it, and leaving it overnight. An annual survey is not necessary because much of the habitat of the species does not require active management.

#### Actions for 2023:

• Perform Scaly cricket surveys in 2023.

**Objective 1.3** seeks to promote scientific research in the Longis Reserve's ecological features and ensure the results of this research are available to the wider community. To achieve this the following actions are proposed for 2022:

#### Action 1.3.1 Promotion and use of Alderney Biodiversity Centre (ABC)

Actions for 2023:

- Support the Ecologist to ensure that all 2021 and 2022 records are uploaded to the ABC (excluding those associated with data collection schemes already connected with the National Biodiversity Network).
- Improve citizen record collection engagement through the promotion of iRecord as a recording tool.

#### 2. Land Management

#### 2.1 Grassland Management

**Objective 2.1** seeks to maintain the current size, plant communities and species richness of dune grasslands and coastal grasslands present within the Longis Reserve. This is currently tackled with a combination of mechanical cutting, Alderney Grazing Animal Projects (AGAP) and control of undesirable species (see section 2.4). To achieve objective 2.1, the following actions are proposed for 2023:

#### Action 2.1.1 Alderney Grazing Animal Project

Figure 4 highlights areas where grazing has historically been undertaken by the AGAP herd. The results of the 2019's floral survey, indicated that the current grazing intensity was lower than optimal. In 2020 plots were

grazed in smaller areas than previously, the plots labelled Longis 1, 2, 3 and Coast 1a and 1b were grazed during 2020. In 2021 the herd has been replenished to 6 cows, with 1 adult female (Guernsey) and 5 juvenile males (Guernsey/Aberdeen Angus Hybrid). The current informal agreement with Stuart Cox is to continue to supplement the herd with young males on rotation. The addition of 5 new cows has helped to establish a grazing intensity closer to that required to maintain the grassland system on Longis.

#### Actions for 2023:

- Prioritise grazing around Longis Pond to promote Common Reed (*Phragmites australis*) establishment and inhibit rank grass extent (Fig. 9, Reedbank 1).
- Push back scrub encroachment at Football by performing a mechanical cut and collect.



Figure 4 Alderney Grazing Project Plots

#### Action 2.1.2 Mechanical Cutting

In areas where cattle grazing is not feasible mechanical cuts are required. Mechanical cutting is largely undertaken along footpaths and the Houmet Herbé coastal path (Fig. 5). It is important to maintain these cutting regimes to maintain species richness and to prevent the encroachment of bracken and scrub.

- Continue the mechanical cutting regime of 2021 and 2022.
- Perform 'Lower Houmet Herbé Cut' in early autumn to inhibit rank grass establishment and promote the presence of Green-winged orchid (*Anacamptis morio*) and Small-flowered Catchfly (*Silene gallica*) (see Wilson, 2008).
- Mechanically cut the Football grazing plot.



Figure 5. The Houmet Herbé coastal path where grass is mechanically controlled (green areas).

#### 2.2 Longis Pond habitat management

**Objective 2.2** seeks to maintain an appropriate balance of tree and shrub cover of Longis Pond's surrounding vegetation whilst maintaining the current size and species richness of open water and reedbed, allowing and encouraging their natural expansion into adjacent grasslands.

Longis Pond is the most important freshwater habitat on the island. Ongoing management is necessary to halt the spread of invasive species and arrest the succession of the ecologically important reedbeds into scrub. To achieve this the following actions are proposed for 2023:

#### Action 2.2.1 Yellow-flag iris control

An action that still needs to be addressed. A literature review of the most up to date understanding of yellow-flag iris removal techniques and ecology needs to be conducted. Using this information and the evidence of success from our own removal efforts., determine the most appropriate method, if any, to reduce yellow-flag cover.

- Review success of previous removal techniques, referring to the most recent understanding of effective removal and applying it to our context.
- Continue to monitor the extent of yellow-flag iris around Longis pond.
- Depending on the outcome of the review, perform iris control and removal, avoiding bird breeding times.



Figure 6. Area of historical yellow-flag Iris control on Longis pond.

Action 2.2.2 Longis Reedbed management

#### Action 2.2.2 Longis Reedbed management

The reedbed at Longis needs to be cut rotationally to create a varied age structure and prevent natural succession to woodland (Fig. 7).

In 2019, following advice from the National Trust Jersey, Isles of Scilly Wildlife Trust and the British Trust for Ornithology, a reedbed monitoring plan was implemented and a survey of the reedbed undertaken (Sydanmaa, 2019).

- Carry out cut(s) in Autumn 2023. Thereafter continue regular cutting regime.
- Continue with reedbed monitoring schedule at high and low annual water levels.
- If resources become available, set up the monitoring of abiotic conditions on the site to be compared with Mannez to help understand why New Zealand Pigmyweed (*Crassula helmsii*) and Parrot's-feather (*Myriophyllum aquaticum*) has not established on the site (salinity, pH, etc.).



Figure 7. Work undertaken on Longis pond during the current 5 year planning cycle (2017-21).

#### Action 2.2.3 Tree aftercare

A screen of willow species surrounds the perimeter of the pond and the entrance to the bird hide. The screen requires regular maintenance.

#### Action for 2023:

• Continue cutting back willow likely to be catching the wind and where it is rubbing against the structure of the bird hide.

#### Action 2.2.4 White poplar control

White poplars (*Populus alba*) are non-native and can quickly encroach onto an area of freshwater. They are also extremely thirsty trees; a 15m tree can consume 51 litres of water a day, whereas a beech (*Fagus sylvatica*) or birch (*Betula spp*) tree will consume a third of this. This is a particular issue in the context of a very dry 2021/22 winter, as well as a hot summer of 2022.

#### Actions for 2023:

- Seek support from the State's Agricultural Team to undertake direct control. Care needs to be taken in the application of chemicals to prevent leaching into the waterbody.
- Continue to control any other areas of white poplar spread in, or adjacent to, the Longis reedbed.

#### 2.3 Mannez pond habitat management

The Mannez pond is a hotspot for dragonfly and damselfly diversity but has seen worrying declines in species presence in recent surveys. It is also the only area on the island with lesser reedmace (*Typha angustifolia*) present.

#### Action 2.2.6 Mannez reedbed management

The lesser reedmace (*Typhus angustifolia*) beds are an important habitat in Alderney; however, without proper management the plant can dominate a pond causing it to eventually succeed into scrub. In 2019, the reedmace

was cut in early November to maintain the visibility from the hide, as part of the rotational management of the reedmace (Figure 8). As cuts were made late in 2019, cuts were not performed in 2020, but were performed in

late 2021/early 2022.



Figure 8. Work undertaken at the Mannez Pond in 2019 and planned for 2023.

Actions for 2023:

- Perform annual cuts to maintain open area in front of the hide (Fig. 13).
- Pile reedmace cuttings to provide a habitat for invertebrates and amphibians.
- See action 2.4.5 for biosecurity measures.
- If resources become available, set up the monitoring of abiotic conditions on the site to be compared with Longis (salinity, pH, etc.).

#### Action 2.2.7 Maintaining areas of open water

Areas of open water are important habitats for several species of bird, dragonfly and damselfly species. They are also vital for bat species such as Daubenton's which forage on these areas. Alderney has a distinct lack of open water and maintaining these habitats is an important conservation objective. The action to repair the dam has been deemed as unnecessary.

#### Actions for 2023:

- Control the spread of yellow-flag iris if deemed necessary.
- Control the spread of New Zealand Pigmyweed (*Crassula helmsii*) and Parrot's-feather (*Myriophyllum aquaticum*) see action 2.4.5

#### Action 2.2.8 Rusty Sallow management

Rusty sallow (*Salix cinerea*) has become well established along the southern margin of the pond. Whilst these plants are a useful screen from the path to the pond they can spread into the main areas of the pond if left unmanaged.

#### Actions for 2023:

- Continue ongoing maintenance.
- Consider planting native species suitable for this site to the south-eastern side of the pond as part of the Alderney Community Woodland Autumn planting.

#### 2.4 Maintaining habitat richness and extent

Control of undesirable species are important actions required to achieve objectives 2.1, 2.4, 2.5, 2.6 and 2.7. These objectives refer to the importance of maintaining the current size and species richness of coastal grassland, heathland, scrub, open dune and marine habitats.

#### Action 2.4.1 Ragwort control

#### Action for 2023:

• Control ragwort during the flowering season (May-July) where it is present in areas grazed by the Grazing Animal Project herd by hand pulling and take to the impot for incineration.

#### Action 2.4.2 Carpobrotus species control

Sour Fig (*Carpobrotus edulis*), Sally-my-handsome (*Carpobrotus Acinaciformis*) and Angular Sea Fig (*Carpobrotus glaucescens*) are non-native, invasive plants present in Alderney's coastal areas where important flora species occur. If left unmanaged, they can quickly spread and smother the growth of native plants. New plants can propagate from small sections of stem so effective removal is necessary to reverse its spread. A major survey of *Carpobrotus* was conducted in 2021, with several patches falling within the reserve borders. One of the landowners, Nigel Dupont, has expressed a desire to remove the plant from his land with help from the AWT. This is a vital opportunity to remove a key source of *Carpobrotus* from the reserve and should be made a priority.

#### Actions for 2023:

- Continue to use WVs to regularly hand pull areas of *Carpobrotus* spp.
- Liaise with Nigel Dupont about the possibility of removing *Carpobrotus* from his land.
- Liaise with States Works Department re possible alternative methods of disposal.
- Map areas of *Carpobrotus* removed in order to monitor regrowth.

#### Action 2.4.3 Scrub control

Scrub can be a useful habitat corridor for wildlife and areas of dense scrub should be maintained. Similarly, gorse stands below a certain age have been strongly linked to the breeding success of Dartford warblers. However, limiting the spread of scrub is important to avoid it becoming dominant within Longis reserve. Much of the scrub control carried out in 2021 has been around the edges of footpaths.

It is recommended that a gorse cutting rotation plan is developed to maximise the benefit it has to local biodiversity. Furthermore, as mentioned in Action 2.1.2 the coastal heathland close to the Houmet Herbé is being encroached on by bracken and bramble. The loss of this site would be a major loss to local biodiversity and aesthetic beauty. Scrub control in the areas adjacent are thus a priority.

- Maintain areas of dense scrub but prevent its encroachment onto grassland areas using hand tools and tractor equipment where appropriate.
- Perform scrub control around the coastal heathland close to the Houmet Herbé trenches.

If resources allow, develop and carry out a gorse cutting regime to create a varied age structure of gorse. Ensure that best practice is followed by referring to the most up to date management literature (see RSPB and Natural England resources, and Conservation Evidence)

#### Action 2.4.4 Bracken control

Bracken (*Pteridium spp.*) will quickly become dominant in an area if left unchecked. Regular cutting 3 times a year is necessary to halt its spread. Bracken can spread rapidly through the rhizome and cutting alone will not damage the underground roots.

#### Actions for 2023:

- Undertake regular cutting sessions outside the breeding season using tractor mounted and handheld equipment, collecting organic matter where there is rank grass present.
- Refer to most recent management literature to ensure our removal methods are the most effective available.

#### Action 2.4.5 New Zealand pigmyweed and Parrot's Feather

New Zealand Pigmyweed (Cr*assula helmsii*) and Parrot's Feather (*Myriophyllum aquaticum*) are invasive nonnative species which are highly competitive and can quickly smother native species. Control is necessary to maintain the extent of open water and lesser reedmace. New Zealand Pigmyweed regenerates rapidly after control measures and can be difficult to eradicate (Ewald, 2014). This has become especially concerning after a series of very mild winters has enabled these species not to die back as normal but to continue to thrive and develop biomass year on year.

#### Actions for 2023:

- Implement robust biosecurity measures with all site users, including Alderney Railway Society and ABO Ltd, to prevent the spread from Mannez to Longis Pond.
- Investigate whether abiotic conditions are responsible for the lack of *Crassula* in Longis Pond and whether salinization or herbicide treatments could reduce the incidence in Mannez Pond.
- Liaise with other Wildlife Trusts which also have Pygmyweed and Parrot's feather invasion to promote learning and collaboration regarding eradication attempts.
- Contact invasive research groups to determine if they would be interested in conducting trials at the Mannez site.

#### Action 2.4.6 Brown-tail moth

The larvae of the brown-tail moth (*Euproctis chrysorrhoea*) can cause extremely adverse allergic reactions to both people and animals. As the brown-tail population was at a low level during 2020 there was no need to remove the tents of these moths.

#### Action for 2023:

• Continue monitoring the footpaths for brown-tail moth larvae and remove where appropriate.

### 2. Public engagement and education within Longis Reserve

Longis Common is a popular area for dog walkers and the AWT maintains a network of footpaths throughout the site. Maintaining and improving access to the site and features is a key commitment from the AWT to the community.

**Objective 3.1** seeks to maintain the current level of public access to Longis reserve and to its condition. To achieve this objective, the following actions are proposed in 2022:

#### Action 3.1.1 Footpath cutting

Action for 2023:

• Perform regular cuts of the footpaths using the Power scythe and tractor mounted equipment and, where appropriate, hand cutting

#### Action 3.1.2 Marker stones

White marker stones mark paths and important features throughout the reserve. As a public resource, these stones should be maintained. Clearly marking paths will also help to limit the disturbance of the public on sensitive areas. Marker stones were repainted and cleared several times in 2022.

#### Recommendations for 2023:

- Clear vegetation from around the stones
- Repaint marker stones as necessary but at least annually.
- Collaborate with Visit Alderney to ensure that marker stones are properly incorporated into island and tourism literature.

#### Action 3.1.2 Houmet Herbé trench maintenance

The trench system along the Houmet Herbé path is prone to flooding and additional work is necessary to ensure this site is safe and remains accessible to the public. During 2021 the edges of the trenches were painted white to make them more obvious. The use of a solar power pump was also trialled; however, the pump was unable to keep up with the rate of rainfall. The time resources required were greater than expected and it is not recommended to continue the effort in 2023.

#### Recommendations for 2023:

- Monitor water levels within trenches and respond with appropriate remedial measure(s).
- Ensure that the trench edges are kept clear and repaint as necessary.

#### Action 3.2.1 Signage, information and important features

In collaboration with Visit Alderney, signage was maintained throughout the reserve. The renovation of the Odeon meant that there was a possibility that the public will attempt to drive up to the site. To avoid this temporary signage was installed and this is to be replaced with a permanent 'No car access' sign by Visit Alderney in 2022.

Recommendations for 2023:

- Continue to work with the Visit Alderney team to improve access and information points around the site.
- Maintain all other signs and information boards around the site.

#### Action 3.3.1 Maintenance and enhancement of Longis infrastructure

**Objective 3.3** seeks to maintain and if possible enhance the existing infrastructure i.e. Longis and Mannez birdhide facilities. To achieve this objective, the following actions are proposed in 2022:

#### Recommendations for 2023:

- Regularly sweep and clean the inside of the hides.
- Maintain and re-treat the outside of the hides.

- Maintain and update the information boards as necessary.
- Record sightings from sightings books
- Replace flooring in the ringing area of Longis Hide where this has rotted out.

**Objective 3.4.** To involve the community in regular events and activities. To achieve this objective, the following actions are proposed in 2023:

#### Action 3.4.1 Wildlife Volunteers

Wildlife Volunteers (WVs) are a vital resource to the AWT, however, engagement with under 50's has been suboptimal. Furthermore, few new regular WVs have been recruited during 2022, with several long-term volunteers retiring from the physical work. A number of new islanders have expressed interest and it is important that we continue to promote the sessions on the radio, local print media and on social media. The physicality of the work is alienating some of the more elderly volunteers, as such, it is important to emphasise when sessions have less intense work available.

#### Recommendations for 2023:

- Liaise with the Outreach Officer to advertise and promote the sessions to encourage new members to join.
- Encourage individuals to get involved in longer term projects and/or take on greater responsibilities for the AWT.
- Offer a diverse and engaging work programme, suitable for all ages and abilities.

#### Action 3.4.2 Community Rock pooling

Rockpooling offers a great way for community members of all ages to gain greater exposure to the rich diversity of inter-tidal species found within Longis Reserve.

Action for 2023:

• In collaboration with the Marine and Outreach teams, offer both day and evening rock pooling events through the late spring and summer.

#### Action 3.4.3 Beach Cleans

AWT's WV's performed a number of beach cleans within 2022, collecting at least 500kg of rubbish.

Actions for 2023:

- In collaboration with the Outreach Officer, promote the Big Channel Island Beach Clean event (February), particularly encouraging households to perform cleans within the coastal areas of Longis Reserve.
- In collaboration with the Outreach Officer, promote the Big Spring Beach Clean with Surfers Against Sewage (April).
- In collaboration with the Outreach Officer, organise a beach clean as part of World Oceans Day (June).
- Promote nurdle hunts along the coastline of Longis reserve, particularly within the month of the Great Nurdle Hunt (September/October).

# Actions 3.4.4/3,4.5/3.4.6/3.4.7 Wildlife Week/Big Wild Weekend/Alderney Week/Wildlife Festival *Recommendations for 2023:*

• Ensure the Longis Reserve is well represented within the events programme for the year.

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## Appendices

#### Appendix 1 Gantt Chart Detailing Work Programme for the Year 2023

LONGIS RESERVE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec
AGAP												
Grassland cutting												
Bramble control												
Longis Pond/Reed-bed												
Mannez Pond/Reed-bed												
Footpath maintenance				Breeding season: avoid tractor in breeding								
Ragwort Control												
Carpobrotus spp. Removal												
Bracken Control												
Amenity Features												
Litter picking												
Brown Tail Moth Control												
Planning												
Aftercare of planted trees												
Survey and monitoring						/						
Terrestrial												
Phase 1 and NVC surveys												
UKBMS transect (butterfly)				1st April to 29th September								
BCT surveys (bumblebees)			Last Week of each month									
Amphibians (ARC and GBRC)		3 Visits										
Reptiles (ARC and GBRC)			3 Visits									
Garden Moths Scheme			5th of March to Friday 5th November									
NBMP Field survey (bats)												
Breeding Birds Survey (CBC												
Method)												
Wetlands Bird Survey												
Dragonfly Survey												
Intertidal (Conducted by Marine Ecologist and Ramsar Officer)												
Habitat mapping survey												
Intertiday crab surveys												
Green ormer pop. assessment												
Invasive species assessment												
Seasearch Surveys												
Eelgrass ecology survey												
Fish and shellfish assessment												

#### Appendix 2 Bat Conservation Trust guidelines in how to participate in the National Bat Monitoring Program

#### Field Survey card (noctule, serotine, pipistrelle)

#### **Planning your survey**

Survey dates: 1st to 15th July; 16th to 30th July

Materials: route map, spot descriptions, survey form/notebook

Ensure that you have read the health & safety checklist, walked your route during daylight &

secured permission from relevant landowners

Be in position to start the survey approximately 20 minutes after sunset at ...... pm

(see sunset timetable & pencil in the start time here)

#### Starting your survey

Just prior to starting, record the following details:

Temperature Weather conditions (cloud, wind, rain)

Date Start time

Don't forget to record the make of bat detector that you have used & your experience/skill level on the survey form

#### Methodology

- 1. Begin the first walk with your detector tuned to 25kHz.
- 2. Listen for noctules/serotines only. Pause to check identification if necessary & then resume.
- 3. If it is unclear whether a bat is a noctule or serotine, record as 'unsure'. Record results as Walk 1.
- 4. Ignore ALL other species.
- 5. At first spot, re-tune detector to 50kHz and record pipistrelle activity common (45kHz) & soprano (55kHz) for two minutes.
- 6. If you cannot identify the species of pipistrelle, record as 'unsure' under Spot 1.
- 7. Ignore ALL other species.
- 8. At the end of two minutes, re-tune your detector to 25kHz and commence Walk 2. Repeat the method until you have completed your route.
- 9. After completing Spot 12, stop the survey and record your finishing time.
- 10. Note any changes that you have made to the route.
- 11. If abandoning the survey at any time, record the point at which you stopped & the reason for stopping.

#### Appendix 3 Guidelines on how to conduct UK Butterfly Monitoring Scheme transects

#### WHEN TO MAKE TRANSECT COUNTS

**Time of year:** A full season's transect counts take place once a week for 26 weeks from the beginning of April to the end of September. Week 'one' runs from 1st-7th April, week 'two' 8th-14th April and so on, until week 'twenty-six' which runs from 23rd-29th September. You can record earlier than 1st April (25th-31st March is week 0, 18th-24th March is Week -1 etc.)

or after September (30th Sept- 6th Oct is Week 27, and so on). If the weather conditions are suitable, you should record even if there are not likely to be any butterflies present (e.g. early/late in the season) – a negative result is still a result.

**How many weeks:** As many weeks should be walked as possible, as gaps reduce the quality of the data and too many can render it virtually useless. The more gaps the less species-indices can be calculated. Where it has been decided that a transect is aimed a single, usually rare, species (or sometimes for two or three species) then weeks should be walked that cover the flight period(s), with zero counts at either end.

**Time of week:** You can record on any day of the week, but should aim to walk the transect on the first opportunity that the weather is suitable (some weeks you may not get a second chance!). You only need to record more than once a week if the weather on your first walk did not meet the criteria.

**Time of day:** Transect counts should ideally be made between 10:45 and 15:45 hours, though between 10:00 and 17:00 hours is usually allowable, though butterfly activity may drop off rapidly during the late afternoon so later times should be avoided.

**Weather conditions:** Transect walks should only be carried out in warm and at least bright weather, with no more than moderate winds and not when it is raining. The minimum criteria are either 13-17°C with at least 60% sunshine, or if there is no sunshine the temperature must be 17°C or above. Windspeed (Beaufort scale) should be no more than 5 unless the transect route is sheltered from the wind. Do not record if the temperature is below 13°C except in northern upland areas where, if butterflies are active, they may be recorded in temperatures down to 11°c. Check that conditions are suitable before you start the transect, and that if the temperature is less than 17°C there is likely to be sufficient sun.

**Recording butterflies:** walk at a slow, steady pace counting all butterflies seen within a fixed distance – the recommended distance is 2.5m either side of the transect line and 5m ahead. In some habitats e.g. along sea cliffs or woodland rides, it is acceptable to record at a width of 5m along one side only of the transect line. A wider area is recorded on part or all of some transects (e.g. 10m instead of 5). Always stick to the limits established when the transect was set up. Try to avoid double counting where possible e.g. when an individual butterfly repeatedly flies in and out of your recording zone. However, if you lose sight of an individual, and later regain sight of the same species do not assume this is the same individual. Do not count butterflies behind you.

Try to identify and separate all species you encounter, including where possible 'difficult' species such as Small and Essex Skipper, whites and the fritillaries. If similar species such as Small White and Green-veined White are flying together at a site you may want to net a sample (a small clear plastic pot can be very useful to temporarily confine the butterfly so it can be examined more easily – hold pot in the shade), to determine the proportion of each species present -you can then divide up your overall counts accordingly. For example, if you catch and identify 8 Small Whites and 2 Green-veined Whites, a count of 30 unidentified whites can be converted to an estimated 24 Small Whites and 6 Greenveined Whites. Note that you will need a license to capture High Brown Fritillary and the use of nets may be prohibited in some areas - contact BC for details. If you are not sure how to identify any species of butterfly you are likely to encounter with certainty then you should take a good identification guide with you. If you see interesting species outside your recording area these should not be included in the transect count but can be recorded in the notes section at the foot of your form or on the back of the form.

#### Appendix 4 Guidance on recording Bumblebees during Bee Walk, Bumblebee Conservation Trust.

#### **Recording bumblebees**

• Bumblebees should be recorded on the monthly recording form. A separate form should be used for each month. Honeybees should also be noted if possible. You do not need to record solitary bees.

• Fill in the environmental and transect details first. Before you begin walking fill in your name, site, date, weather conditions and start time in the spaces provided on the form.

• Walk your transect route at a steady pace. Do not linger in hotspots to improve your count, as this will bias results.

• Record all the bumblebees you see within your 'recording box'. This extends 2m either side of you and 4m ahead. Do not look behind, and do not count bees seen outside this box.

• Where possible record the caste (queen, worker, male) of each individual as well as species, and make a note of any interesting behaviour, such as mating. Record unknown bumblebee or caste for any bumblebees you are unsure of.

• Nets and pots can be used to capture bumblebees for closer examination when necessary. For details on suppliers see the BeeWalk website.

• Ensure that all recording is completed on the form at the end of each walk. Double-check for errors and omissions, as it will be impossible to accurately fill in any blanks later.

• Where estimates have to be made (e.g. when numbers are too large to count accurately) make sure an actual figure is recorded (e.g. 45 rather than 40+).

• If something unusual is recorded, add a note at the bottom of the recording sheet to confirm that what you have recorded is correct. If it's an unusual species, it should ideally be photographed for confirmation. Unusual data will be followed up via email.

• Don't forget to fill in the finish time at the end of your walk.

#### Appendix 6. Garden Moth Scheme methodology

Please refer to <u>http://www.gardenmoths.org.uk/</u> for latest methodology.