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**Biodiversity Enhancement Report Update 2023/24**

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| **Progress Summary** | **Code** | **Progress** |
| **Engage and support participation and understanding to embed biodiversity throughout decision making at all levels** | **1.1** |  |
| **1.2** |  |
| **1.3** |  |
| **1.4** |  |
| **Safeguard species and habitats of principle importance and improve their management** | **2.1** |  |
| **2.2** |  |
| **2.3** |  |
| **2.4** |  |
| **2.5** |  |
| **Increase the resilience of our natural environment by restoring degraded habitats and habitat creation** | **3.1** |  |
| **3.2** |  |
| **3.3** |  |
| **3.4** |  |
| **Tackle key pressures (Climate change/Invasive non-native species/Habitat loss) on species and habitats** | **4.1** |  |
| **4.2** |  |
| **4.3** |  |
| **Improve our evidence, understanding and monitoring** | **5.1** |  |
| **5.2** |  |
| **5.3** |  |
| **5.4** |  |
| **Put in place a framework of governance and support for delivery** | **6.1** |  |
| **6.2** |  |
| **6.3** |  |
| **6.4** |  |

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| **Not yet actioned** |  | **In progress** |  | **Complete** |

**Biodiversity Enhancement Report 2020/22**

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| **Nature Recovery Action Plan Objective 1** | | | | **Engage and support participation and understanding to embed biodiversity throughout decision making at all levels** | | | | | | | | | |
| Code | Aim | | Action | | | Lead | | Key Depts. | | Performance Measure | Progress | | | |
| Not yet Actioned | In Progress | Complete | |
| 1.1 | Ensure biodiversity integration with SAF | | Biodiversity and sustainability to be considered during the decision-making process. Ensure links with partners Cofnod, NWWT. | | | Estates | | Estates and SAF | | Legislation and policy included in documentation where applicable (Executive Director panel) |  |  |  | |
| Progress | | **Legislation and policy changes are, where applicable to biodiversity, regularly updated in the Biodiversity, ecosystems and resilience plan which is reviewed by the executive panel.**  **Changes in legislation are passed to the estates department from the Local Environmental Recording Centre (LERC), Cofnod**  **Where applicable legislation and policy affecting biodiversity, issues have been included within documentation.**  **Changes in legislation are passed between the Sustainability and Action Working Group (SAF) to the estates department**  **Any changes in specific legislation (e.g. section 7 species) are considered within either current working practice or the Biodiversity, ecosystem and resilience plan and are reported to the SAF committee** | | | | | | | | | | | |
| Future Opportunities | | **Better communication with the Amphibian Reptile Conservation NGO (ARC) will keep us advised of recent legislation regarding newts, toads and grass snakes, Any legislative changes effecting current working practices can then be agreed with SAF and passed up to the executive committee via the Biodiversity, ecosystem and resilience plan updates.**  **Pond now fully restored - surveys planned for 2024**  **Newt surveys completed 2023 to assess population as per NRW definitions it was shown that we have a medium sized population.**  **Coppicing opportunities for volunteer transects to encourage woodland butterflies.**  **Botanical recorder available for mid-June.**  **Ivy cleared from trees where it was proving destructive to the ecosystem of the tree and increasing the overall weight making it prone to falling in high winds in the forest school area closest to the buildings** | | | | | | | | | | | |
| 1.2 | Implement the new biodiversity and ecosystems resilience duty | | Identify departments key responsibilities to creating opportunities and amending actions in the duty plan | | | Estates | | Estates and SAF | | SAF to identify key departments role for actions and monitor |  |  |  | |
| Progress | | **Key departments identified to perform specific roles within specific activities. Greater cohesion formed between Estates, Health, Safety and Environment departments, Communications, Marketing, Recruitment & Admissions (CMRA) as the responsibilities and emphasis on biodiversity have taken on a wider form (e.g. across campuses).**  **As a result of greater awareness from the SAF group roles have been more clearly defined.** | | | | | | | | | | | |
| Future Opportunities | | **Cross campus and county opportunities to monitor biodiversity Northop / St Asaph 2022. Some projects identified showing a need for volunteers e.g. Hedgerow planting.** | | | | | | | | | | | |
| 1.3 | Legislative and policy requirements are reflected in reports | | Identify and assess university plans and proposals for biodiversity impact, providing recommendations  Inclusion of the biodiversity and sustainability duties within committee reports | | | Estates and SAF | | Estates and SAF | | On- going access by estates to amend report where necessary according to change in legislation or circumstance  Completed report reviewed by Executive Committee |  |  |  | |
| Progress | | **Plans and proposals for the university for biodiversity impact are with the framework of the University’s Environmental Sustainability Strategy and under the six objectives of the Nature Recovery Action Plan for Wales (NRAP).**  **The provision to account for any environmental impacts regarding biodiversity have been made more efficient since the monitoring schemes have been put in place; monitoring efficiency has been limited by the Covid-19 pandemic.**  **Plans have been made to reintroduce recording and monitoring to allow for continuous assessmentus to continue assessing environmental impacts whether positive or negative e.g. local monoculture forming threatening the biodiversity of the micro ecosystem**  **\*Greater provision for amending the Biodiversity, ecosystem and resilience report is in progress.**  **Biodiversity and sustainability duties are part of the SAF committee function.** | | | | | | | | | | | |
| Future Opportunities | | **On-going access to amend the report will allow updates to be published quicker however, there is a requirement for them to be verified at least by the SAF committee when university policy involvement, or information regarding the change of legislation is involved.** | | | | | | | | | | | |
| 1.4 | | Increasing awareness of plan | Links with University Comms team, Cofnod and NGO’s  Awareness and education using effective comms, marketing, events, ensuring that the policies and report is available to students studying biological sciences to become an integral part of the ownership of the plan.  Link to Green champion, sustainability and environmental activities via comms, marketing and student societies.  Promote volunteering on sites to enhance work and reduce the workload for Estates, to enhance student knowledge and experience and well being | | Estates, SAF  Academics  Estates, SAF  Estates, SAF, Academic | | Estates  Estates, SAF  Estates, SAF, Academic | | SAF to promote and effect communication between departments  SAF to promote and effect communication between departments  Estates and SAF meetings  SAF/ Academic; communication | |  |  |  | |
| Progress | **SAF have played a big part in the arrangement and liaison between groups ensuring that the benefits enjoyed by event attendees fall within the boundaries of the plan. Some events held for ‘Green week and Mental Health week have been nature based and successful, some of which were created and ran by the University by the outside wing of Xplore Nature.** | | | | | | | | | | | |
| Future Opportunities | **SAF have committed within their Environmental Sustainability Strategy 2018-2025 to run a minimum of three staff/ student or community volunteering activities relating to biodiversity enhancement to take place per annum. Future opportunities will be revisited when the University and NGO’s are fully staffed.**  **Volunteering opportunities are beginning to return by linking with other events. Revised plan updated and translated.** | | | | | | | | | | | |

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| **Nature Recovery Action Plan Objective 2** | | | | | | **Safeguard species and habitats of principle importance and improve their management** | | | | | | | | | | | |
| Code | Aim | | | | Action | | | | Lead | | Key Depts. | | | Performance Measure | Progress | | | |
| Not yet actioned | In Progress | Complete | |
| 2.1 | Confirmation of environmental legislation within documentation | | | | Include environmental legislation in documentation | | | | Estates | | Estates/ Executive Committee | | | Assessment of documentation by Estates and Executive committee |  |  |  | |
| Progress | | | | The estates department continue to provide advice on changes to biodiversity, licencing, monitoring and protected species to the executive committee within the framework of legislation and Acts of Parliament. Any changes to the plan are agreed changes initially through SAF and agreed by the executive committee. Newt and conservation licences were attained during the last reporting period however only limited work was executed because of the pandemic.  **New and updated legislation is a standing agenda item at SAF and relevant changes are discussed at the quarterly meetings.** | | | | | | | | | | | | | |
| Future Opportunities | | | | After Covid restrictions were lifted footfall started to increase, this does not appear to have impacted upon our Section 7 species. NB: Sometimes additional footfall is beneficial e.g. for plants that use animals to transport seeds; transportation within mud on a shoe, there is a fine balance between too little footfall and too much. | | | | | | | | | | | | | |
| 2.2 | Provide evidence to ensure that species and habitats are safeguarded by following the plan. | | | Ensure relationships with government and NGO continue levels of communication with COFNOD (LERC) | | | | Estates | | Estates | | | Accessibility to reports and partners | |  |  |  | |
| Progress | | | **The university have worked closely with Cofnod to ensure that species and habitats are identified and safeguarded through continued land management practices that benefit the site or species. Cofnod have kept the university informed of Schedule 7 species that needed safeguarding. Current land management practices in place at the University meet the requirements of the Schedule 7 species identified on campus (e.g. Dunnock (*Prunella modularis*) provision is made for hedgerow and vegetative cover). None of the Schedule 7 species have been adversely affected as a result of increased footfall reporting period. Over the last reporting period we have been careful to ensure that there is adequate vegetative cover for nesting, resting, protection from predators, such as sparrow hawks and throughput of people, the Dunnocks appear to have adapted well to this and moved their foraging to quieter parts of the campus.**  **At the Wrexham campus staff and volunteers have worked diligently to ensure the welfare of the Hedgehog population as part of a Hedgehog Friendly Campus campaign both by tending to the Hedgehog’s environmental needs and through social media to ensure a steady stream of volunteers to cover student volunteers that have left finished their degree courses**  **As previously mentioned, we have no record of Hedgehogs on the Northop campus due to the presence of Badgers.**  **Any changes to Schedule 7 Wildlife and Countryside Act will not impact upon the University unless a species is recorded that is listed within that schedule. Cofnod (LERC) keep informed the University of any species within the schedule to enable special provision to be made for them.**  **The University still promotes Friendly Campus award with activities involving staff and students to raise awareness about hedgehogs and making the campus more accessible to hedgehogs.**  **In Northop, there has been a focus on increasing the awareness of the value of particular ecosystems and habitats to new staff. Ground cover has been increased with the removal of Italian Alder on the North side of the pond; allowing more light promoting photosynthesis of biotic organisms within the pond and shelter for newts, toads and frogs.** | | | | | | | | | | | | | | |
| Future Opportunities | | | **Further investigation of changes in habitats that have been undisturbed are being organised, these may require minor changes in management strategy. It is hoped to produce a greater awareness of specific ecosystems and protection of habitats, amongst staff and volunteers promoting more incentive for projects to move forward (e.g. the use and management of hedgerow for wildlife corridors). New Hedgerow has been planted and an Orchard tree have been placed strategically however these will take some time to grow. At Northop, new hibernacula have been created on the south side of the pond using the Italian Alder and Willow that was cleared from the pond restoration exercise, the felled trees and debris were used as a base for two banks and covered with the slurry that came out of the pond creating natural hibernacula for grass snakes,, toads, frogs and two species of Newt; Great Crested Newt and Common or Smooth Newt..** | | | | | | | | | | | | | | |
| 2.3 | Assess resilience of ecosystems against environmental changes (e.g. effects of climate change – seasonality differences between different species relationships within a given ecosystem | | | Monitoring of records and assessments of trends. | | | | Estates | | Estates | | | Results of trends will show major changes in species presence although not abundance | |  |  |  | |
| Progress | | | **Results of monitoring species for biodiversity across 2023 - 2024 have been mainly focused towards research on the differences to biotic organisms before during and after the pond restoration with some botanical and avian recording in June 2023 and April / May 2024** | | | | | | | | | | | | | | |
| Future Opportunities | | | **The lack of recording and monitoring of species for reporting periods plus the lack of disturbance throughout the period may serve to provide more definitive data highlighting less biodiversity because of changes in climate, seasonality and other environmental factors. Only through recording can we monitor these changes and react to them accordingly.**  **Plans have been made to ensure a greater consistency of recording and monitoring is achieved.**  **NB: Increases in species numbers and not abundance of existing species is not always a positive. To lose just one species could damage the links in already fragile ecosystems which may go unnoticed for several years. For example, the loss of habitat for newts due to reduction in open water because of silt, pondweed and proliferation of certain plants could lead to the loss of 3 species of newt but gain several new plants and invertebrate species. Longer term and without management the area may become dominated by a limited number of plants meaning the habitat loses its biodiversity value.**  **So far we have managed to avoid any dramatic increases in monocultures.** | | | | | | | | | | | | | | |
| 2.4 | 2.4.1 Create management strategies to cope with environmental change | Adapt management within Biodiversity and Ecosystem Resilience plan according to nature recovery action plan. Assess for costs | | | | | Estates/ SAF | | | Estates/ SAF | | Re-assessment of species, ecosystem or habitat and monitoring to ensure resilience. | | |  |  |  | |
| Progress | **Part of the way that biodiversity and ecosystem resilience is monitored and managed is to continually look for any environmental changes (e.g. If there is a long hot summer, action can be taken to ensure that there are enough areas where water is provided). Areas that are coppiced are also chosen specifically to provide shade and shelter to animals and plants; newts and helleborine.**  **When there were mild winters with late heavy snowfall action was taken to increase the amount of food in bird feeders and to ensure water was provided.** | | | | | | | | | | | | | | | | |
| Future Opportunities | **There has been an opportunity to raise awareness of the importance of ecosystems across multiple habitats at Northop to volunteers. E.g. planting of hedgerow to create wildlife corridors and managing coppicing activities to promote biodiversity. Using the right coppiced species we have also been able to direct species which were hitherto struggling to now providing thriving communities. E.g. Common blue, Speckled Wood and Orange .**  **The human impact of these activities have been beneficial to volunteers wellbeing and mental health.** | | | | | | | | | | | | | | | | |
| 2.5 | Ensure links to outlying habitats or species populations are connected via wildlife corridors; hedgerow etc., using the plan | | Record and assess species geographic position | | | | Estates | | | Estates | | Examination of data to assess trends and movement of species or habitat degradation | | |  |  |  | |
| Progress | | **It has been shown through recording that there has been a migration of certain species from one geographical area to another; Notable changes to speciation were the presence of Waxwing in the late winter extending their regions and the presence of Red Kite both in the summer of 2023 and the spring of 2024**  **Throughout the years we have been mindful of the links to our outlying ecosystems and species populations. Examples of this are: laying down corrugated mats between ponds to provide shelter for toads, slow worms and grass snakes as well as ground cover for invertebrates in the summer. Habitat piles have been placed in strategic points; not only to provide a specific ecosystem but also a link between two or more similar ecosystems separated geographically.**  **There has already been an increase in amphibian activity due to the increased hibernacula around the pond as a result of the joint work between ARC (Amphibian and Reptile Conservation and Wrexham University.**  **Notable changes to speciation were the presence of Waxwing in the late winter extending their regions and the presence of Red Kite both in the summer of 2023 and the spring of 2024**  **More sightings of fritillary butterflies have been seen as a result of woodland clearing allowing more light to promote Common and Early Common Dog Violets *(Viola riviniana* and *Viola reichenbachiana* respectively) one otf the fritillary butterfly’s food sources.**  **A large Ponderosa pine was cleared to open-up woodland allowing more light. The habitat piles of logs and woodchip have encouraged vegetation continues to increase the Wren (*Troglodytes troglodytes*) population.**  **Field margins are deliberately left wide to encourage thistle, nettle and bramble to provide ground cover for various mammals and birds but using this method acts as a buffer zone for invertebrates, particularly butterflies when the fields are cut**. | | | | | | | | | | | | | | | |
| Future Opportunities | | **More opportunities to get volunteers to help with bird, newt and moth surveys as well as conservation projects with a view to enhancing student wellbeing and mental health.** | | | | | | | | | | | | | | | |

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| **Nature Recovery Action Plan Objective 3** | | | **Increase the resilience of our natural environment by restoring degraded habitats and habitat creation** | | | | | | | |
| Code | Aim | Action | | Lead | Key Depts. | Performance Measure | Progress | | | | |
| Not yet actioned | In Progress | | Complete | |
| 3.1 | Increase the diversity of habitats for pollinators | Arrange for varying lengths of grassland to be cut at intermittent periods allowing margins for recovery | | Estates | Estates | Increase in diversity proven through higher record presence and abundance |  |  | |  | |
| Progress | **Field margins are left deliberately wide to encourage thistle, nettle and bramble to provide ground cover for various mammals and birds; using this method acts as a buffer zone for invertebrates, particularly butterflies when the fields are cut. The grassland is cut once a year in the spirit of Tir goval (a whole farm Agri-environment scheme) usually between the end of July and the first week in August depending on the weather and whether all section 7 plants have finished seeding. The increase in diversity in field margins has continued to grow on a yearly basis.**  **The continued presence of Yellow Rattle (*Rhinanthus minor*), a semi parasitic plant to various grasses, has also continued to play a part in increasing biodiversity resilience; minimising grasses allows wildflowers to germinate as opposed to being chocked by mats of grass root. The wildflower meadows are checked for the presence of this plant annually.**  **There has been a good presence of Yellow Rattle (*Rhinanthus minor*) to June 2023 and 2024 because of seed collected during the late summer of 2022.**  **At Wrexham Campus, wildflower areas in Mold Road car park and the Communal Garden are managed to provide cover for invertebrates and small mammals. The wildflowers are cut at the end of the season and cleared.** | | | | | | | | | |
| Future Opportunities | **At Northop, there is potential to assess the impact on biodiversity and resilience by cutting the grass in a designated area to three different lengths on a regular basis. As a result of this activity, we had a record number of Bee Orchid (*Ophrys apifera*) which favour disturbed ground also the butterflies Small Copper (*Lycaena phlaeas*) and Meadow Brown (*Maniola jurtina*) were prolific with a noticeable increase in the number of Gatekeeper butterflies (*Pyronia tithonus*) which falls in line with the national trend.** | | | | | | | | | |
| 3.2 | Restore waterways and Ponds | Organise volunteer work party for pond clearance to increase resilience | | Estates | Estates | Monitoring. Increased diversity of flora and fauna in worked areas as proven by last pond clearance 2018 and records taken from the Bio blitz in 2019 |  |  | |  |
| Progress | **As previously mentioned the pond restoration was completed in late September, early October 2023 in line with the conservation rules regarding pond work in relation to Great Crested Newts.**  **As a result of a very wet winter early spring, it has been difficult to assess which species are coming through however the Water Mint has come back allowing Great Crested Newts to lay their eggs and there is also a new presence of one of the Water Crowsfoot (*Ranunculus sp*.) species.** | | | | | | | | | |
| Future Opportunities | **Further surveying for Newt and Dragonfly populations as well as continued maintenance of the pond and surrounding areas.** | | | | | | | | | |
| 3.3 | Thinning of woodland or coppicing of site promotes growth and promotes biodiversity | Tree surveys on key sites to assess what we have. Coppicing and clearance; see plan | | Estates | Estates | Monitoring of growth and impact on cleared areas |  |  |  | |
| Progress | **The woodland area to the right of one of our buildings has had relatively extensive work done to it with clearance of trees, stripping back of Ivy and use as a forest school area. This has not only been beneficial to the flora and fauna but because of the funding provided by HEFCW as part of the Nature based Social Prescribing project helped with Xplore nature in clearance giving us a big increase in the seating allowing for a restful and mindful area to improve wellbeing and mental health.** | | | | | | | | | |
| Future Opportunities | **Further coppicing and Ivy clearance with volunteers to maintain and extend the previously worked areas .as a part of an ongoing process** | | | | | | | | | |
| 3.4 | Schedule 8 plants - protected | Area containing schedule 8 plants to be sectioned off to allow for proper seeding | | Estates | Estates | Perpetuation and recovery levels recorded to ensure management strategy is working |  |  | |  |
| Progress | **Every year preceding the annual hay baling, schedule 8 plants are sectioned off to ensure they are not disturbed. Broad-leaved Helleborines (*Epipactis helleborine*) grow in at least three places on the site, two of which are affected by the cut.**  **The fields are also checked for Bee Orchids (*Ophrys apifera*) and Common Spotted-Orchids (*Dactylorhiza fuchsii*) to ensure that they have seeded.** | | | | | | | | | |
| Future Opportunities | **Any further additions to schedule 8 plants will be managed according to their specific requirements** | | | | | | | | | |

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| **Nature Recovery Action Plan Objective 4** | | | **Tackle key pressures (Climate change/Invasive non-native species/Habitat loss) on species and habitats** | | | | | | |
| Code | Aim | Action | | Lead | Key Depts | Performance Measure | Progress | | | |
| Not yet actioned | In Progress | Complete | |
| 4.1 | Climate Change | Assess co-dependency within ecosystems to account for seasonality. E.g. flowers appearing late so that pollinators have no food source.  Be aware of potential periods of drought or prolonged rain – counter with alternate food supplies  Carbon emission reduction Enhancement of biodiversity /renewable energy | | SAF  SAF  Estates / SAF  SAF | SAF  SAF  Estates  SAF | Monitor balance of abundance to assess the needs of the deprived species and report to SAF  Monitor populations record and report |  |  |  | |
| Progress | **Co-dependency: As previously cited, yellow rattle (*Rhinanthus minor*), a semi parasitic plant to various grasses has continued to play a part in increasing biodiversity resilience within our wildflower meadow; by thinning out grass, wildflowers can germinate, and flower as opposed to being chocked by mats of grass root. The wildflower meadows are checked for the presence of this plant annually. The presence of *Rhinanthus minor* is checked annually to ensure that it is stopping too much grass coming through and creating a monoculture, creating a loss of biodiversity.**  **Seasonality: with continued relatively temperate winters and protracted summers there have been some concerns that ecosystems will have been affected by seasonality especially when snow appeared late in early spring. Tawny mining bee (*Andrena fulva*) and Ashy mining bee (*Andrena cineraria*) continued to do well in 2023 but the Tawny Mining bee seems to have been affected by the wet start to spring**  **Provision made for seasonality: At the Northop site there are a range of ecosystems providing different vegetation, flowers and berries at different times of the year some of which are in areas that shaded from natural events such as snow allowing generalist pollinators and birds have extended their prospective ranges.**  **Bullfinches, as mentioned in the previous report, continued to thrive throughout the winter of 2023 with an increase in Long-tailed tit populations. Provision was made for a hot summer but the temperatures, apart from a few days, were not so severe, shallow water troughs for drinking and cooling down in a shaded area were provided and were seen to be used. Additional habitat piles in sheltered areas also created cool areas of refuge from all the various elements.**  **Bat and bird boxes have been donated; Italian Alders felled to increase light around the pond however this has made the**  **Carbon Management: Glyndwr University has a Carbon Management Plan**  **Further information can be found on our sustainability pages please follow the link** [**https://wrexham.ac.uk/sustainability/**](https://wrexham.ac.uk/sustainability/) | | | | | | | | |
| Future Opportunities | **Continuous assessment monitoring. More bat, bird and bee boxes. Bird food.** | | | | | | | | |
| 4.2 | Eradication of Invasive Species | Monitor for invasive species American Skunk Cabbage around pond and check for occurrences of Himalayan Balsam on banks of river.  Assessment of Harlequin Beetles over wintering in the residential areas | | Estates and INNS officer | Estates | Monitor and record for zero presence |  |  |  | |
| Progress | **American Skunk Cabbage: There were two remaining Skunk Cabbage remaining since the last reporting period, these were dug out during the pond restoration however one has managed re-establish. to Yellow Iris (*Iris pseudacorus*). Once the Yellow Iris (*Iris pseudacorus* regrows in that area it will be out competed**  **Checks along the river system to ensure that there is no occurrence of Himalayan Balsam will resume over the next reporting period** | | | | | | | | |
| Future Opportunities | **Harlequin ladybird beetles (*Harmonia axyridis*) in the residential area, being self-contained, showed low numbers and are close to being eradicated before they found a way towards impacting upon the local ladybird population.** | | | | | | | | |
| 4.3 | Assess and reduce stress on habitats and priority species | Ensure habitats for priority species (section 7) are maintained according to the plan | | Estates | Estates | Monitoring for presence and abundance to check declines |  |  |  | |
| Progress | **All section seven species were considered within current working practice. On-going woodland, hedgerow and pond management. Licences required are covered by academics and volunteer staff. Working practice was sustained throughout the reporting period.** | | | | | | | | |
| Future Opportunities | **Applications for independent licences for estates department. Newt and Conservation Licences were attained throughout the reporting period. All licences were renewed to cover 2023/24** | | | | | | | | |

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| **Nature Recovery Action Plan Objective 5** | | | **Improve our evidence, understanding and monitoring** | | | | | | |
| Code | Aim | Action | | Lead | Key Depts. | Performance Measure | Progress | | | |
| Not yet actioned | In Progress | Complete | |
| 5.1 | Budgeted time to provide more evidence for decision making | Better use of evidence to manage the sites | | Estates / Cofnod (Lerc) / | Estates | Better reporting and able to provide a measured response to the biodiversity and resilience issues with the sites and ecosystems |  |  |  | |
| Progress | **Unless there is an understanding of what is on the University land it is not possible to know the conservation and sustainability measures needed more time was allocated towards promoting green and mental health activities by the Social Prescribing team and the Student Union as well as volunteers coming from the main campus for various resilience issues.**  **Little monitoring was done across the last reporting period due to lack of resource however there has been some movementtowards freeing up resource for monitoring as from May 2024. Any changes in species presence or abundance should be more recognisable if we have the necessary records making it easier to spot any differences.** | | | | | | | | |
| Future Opportunities | **More budgeted time to be allocated**  **As above** | | | | | | | | |
| 5.2 | Better reporting of evidence to support plan and make fluid adjustments to the plan through analysis of data and reflection of impact | More time set aside to create and analyse evidence to benefit the management of flora and faunae | | Estates |  | Quicker response to ecological issues |  |  |  | |
| Progress | **Wrexham University is alerted by Cofnod when we record a priority species and provision is made for them; our current working practices have covered their needs.**  **SAF is informed of their presence on the sites.**  **Comparative data between years is skewed because of the increase in monitoring and recording across the years; species lists grow disproportionately as more effort is taken.** | | | | | | | | |
| Future Opportunities | **More time to assess differences in abundance can be found through extra resource, however this will take time to take effect and is not within the 2023/24 period** | | | | | | | | |

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| 5.3 | More studies using the data from monitoring and recording using the data provided by Cofnod (Lerc)  to assess environmental and biological impact.  Stability of ecosystems | | | Create analysis format for impact assessment | | Cofnod /Estates  Executive committee | |  | | Thriving and balanced ecosystems. Equal or increased biodiversity figures | |  |  |  |
| Progress | | | **The regularity of surveys of Great Crested Newts, Toads, Dragonflies, Pond and woodland areas conducted to assess ecosystem impacts were increased during 2023, however there were fewer recording days to lack of availability of specialist recorders for that year.** | | | | | | | | | | |
| Future Opportunities | | | **More monitoring is planned in 2024 although it will be later in starting.** | | | | | | | | | | |
| 5.4 | | Increased understanding of existing ecosystems | Encourage more students to record Flora and fauna  More nature-based events to raise awareness of biodiversity needs | | Estates/ academic  Estates/ SAF/Executive committee/ P.R and marketing | |  | | Increase in abundance figures and dates to monitor seasonality  Greater awareness, Higher recording and monitoring figures, abundancy figures rather than just presence | |  | |  |  |
| Progress | **The level of students recording flora and fauna increased marginally in avian recording and the recording of Lepidoptera species because of student participation and recording for their dissertations**  **Classes arranged for Amphibian and reptile study with ARC for 2023.**  **The planned increase in hedgerow from 2023 has happened providing strategically placed wildlife corridors. Increase of biodiversity coppice management to promote biodiversity and abundance**  **Mental health and well-being weeks have been used effectively to exhibit the natural countryside available to students giving the opportunity to make them aware of future projects** | | | | | | | | | | | |
| Future Opportunities | **There may be the reintroduction of a degree which is more akin to conservation and biodiversity hopefully producing more volunteers for conservation and wildlife projects. The benefits of this will be an increase in the number of records. NB: Abundance can then be taken into account for key species for future statistical monitoring analysis.**  **Numbers of volunteers and resources have risen slightly and new staff strengths within the biodiversity arena have been explored.** | | | | | | | | | | | |

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| **Nature Recovery Action Plan Objective 6** | | | | | | | **Put in place a framework of governance and support for delivery** | | | | | | | | | | | | | | |
| Code | Aim | | | | | Action | | Lead | | | | | Key Depts | | | Performance Measure | | Progress | | | | |
| Not yet actioned | In Progress | Complete | | |
| 6.1 | Compliance to the environmental laws and policies | | | | | Assess time/and priorities of existing staff | | Estates / Executive Committee | | | | | Estates / Executive Committee | | | Staff and resource availability | |  |  |  | | |
| Progress | | | | | **Any changes to environmental laws and policies that affect biodiversity or ecosystems have generally been highlighted via Cofnod. General legal advice, to allow the university to comply with legislation, has come from the SAF and the Executive committees. They are actioned by the estates departments or by team members within the SAF committee.**  **By monitoring the species by abundance over a given period and presence of species showing the biodiversity of habitat within ecosystems per habitat then comparing data, it should have given a greater indication of what is happening to flora and fauna. The abundance method can quantify what is present within a given habitat and the presence method can show any potential gaps or flaws in the ecosystem within those habitats. Constraints such as weather and lack of resource consistently slowed down these objectives** | | | | | | | | | | | | | | | | |
| Future Opportunities | | | | | **There is a potential for more staff and resource availability. Licencing and surveying to be under the control of estates. Moves are afoot to help with this problem but are just marginally outside of this reporting period**  **By integrating a combination of species within hedgerows, biodiversity is strengthened - the new hedgerow has six species integrated within, but they were at the whip stage and will need time to grow, more trees are planned for October 2024 to top up any whips that did not last as whip mortality is often high.** | | | | | | | | | | | | | | | | |
| 6.2 | | Increased revenue to support biodiversity (Plan) | | | Look at grants for biodiversity projects | | | | Estates / SAF/Executive Committee/ Cofnod (Lerc) | | | | Estates / SAF/Executive Committee/ Cofnod (Lerc) | |  | |  | | **Moved from NOT YET ACTIONED TO IN PROGESS** |  | | |
| Progress | | | **Grant schemes were issued for the pond (Wrexham University and ARC) and for some of the activities and budgets equipment through the Nature based Social Prescribing project.**  **Grant schemes were also issued for the mixed species of hedgerow** | | | | | | | | | | | | | | | | | |
| Future Opportunities | | | **More plants have been applied through via Horticulture Wales for Hedgerow. Sites for a second pond are being explored prior to applications for grants** | | | | | | | | | | | | | | | | | |
| **6.3** | Use of the plan as a Framework of support | | Publish and ensure that people are aware of the report and plan, integrate groups and ownership | | | | | | | Estates / P.R/Marketing/ SAF/Executive Committee/ Cofnod (Lerc) | | | Estates / P.R/Marketing/ SAF/Executive Committee/ Cofnod (Lerc) | | Greater communication between departments and organisations | |  | |  |  | | |
| Progress | | **The plan has gradually evolved across the years 2016-2025 to its current form, considering changes in legislation and management working practices, focusing on the protection of ecosystems and priority species. SAF have placed greater emphasis on biodiversity and have driven changes to the plan. The Executive committee have approved the plan. Partners, Local Environmental Recording Centre Cofnod and Amphibian, Reptile Conservation have also played their part in shaping this document. For events, comms and marketing have contributed in helping to raise awareness. There has currently been good communication between the departments and organisations. Links have been sent to the relevant departments relating to biodiversity, ecosystem and resilience changes to keep them informed. The plan is now available in Welsh and English on the Wrexham University website.** | | | | | | | | | | | | | | | | | | | |
| Future Opportunities | | **SAF to continue to drive key issues relating to any impacts on biodiversity, ecosystems and resilience. Estates to maintain and promote partnerships with governmental and NGO partners. Greater distribution of certain elements of the plan may encourage additional volunteers** | | | | | | | | | | | | | | | | | | | |
| 6.4 | Incorporation of governance and support within the framework of the SAF committee | | | Link to SAF policies | | | | | | | Estates / SAF | Estates / SAF | |  | | |  | |  | |  | |
| Progress | | | **The’ biodiversity, ecosystem and resilience plan’ is included within the framework of the Environmental Sustainability Strategy 2018-2025 that is governed by the SAF committee.** | | | | | | | | | | | | | | | | | | |
| Future Opportunities | | | **Better links to SAF policies from the plan**  **SAF has increased activities and promoted higher levels of awareness through promotion of events. Activities include Hedgehog friendly campus project, Go Green week, Well-being week in Feb / March using visualisation to create the concept of a ‘nice place to be for the students and wildlife’. Both the afore mentioned areas, the cleared area of woodland and the new transparent dome will continue to be used.** | | | | | | | | | | | | | | | | | | |