# **HABITAT ACTION PLAN**

## September 19 – August 20

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| **COMPART-MENT NO.** | **COMPARTMENT NAME** | **ACTION** | **WHEN** |
| **1A** | **Inner lake**  NB not including marsh or shingle edges to lakes – see 2 A | * Remove old straw bales netting and floats from area near east hide * Lake already at high level after August 19 top up – review after marsh management whether it needs further top up * Liaise with LT and contractors re overhaul of water recirculation system and aerators * Continue to monitor Azolla and whether weevils still present – order weevils if necessary * Continue to use Symbio treatment for algae in summer months but remove algae by hand if necessary when building up in accessible areas * Monitor any spread of floating duckweed * Record pond dip invertebrates to review water quality * (see also tern rafts) | Sep 19  Nov 19  Spring/summer 20 |
| **1B** | **Outer lake**  NB not including marsh or shingle edges to lakes – see 2A – E and 5C | * Top up started late August 19 and ongoing from Sep 19 – will need extensive top up in autumn * Maintain levels in OL over spring and summer. * Monitor for Azolla. * Regular litter pick * Record pond dip invertebrates to review water quality * (see also tern rafts) | Sep 19  Spring/summer 20 |
| **1C** | **Streams** | * Now part of 3A ALDER CARR |  |
| **1D** | **Ephemeral pool**  Gravel based area below and in front of bat tower which extends underneath and along both sides of adjacent inner boardwalk in southerly direction | * Remove most self-seeded plants from pebble area, especially grass and bramble but retain purple loosestrife, figwort and dock . Cut meadow edge to side. * Dig over and weed long strip of sand and pebbles on other side of pool. Remove bramble encroaching from willows and cut bramble back hard into trees * Dig out pool to greater depth. * If willow poles and piles of brash are stored here over winter, clear brash and sort poles by early March 20 | Autumn 19 and review in spring  March 20 |
| **1E** | **Small pond**  Pond to the right of the west hide behind adjacent willows and accessible via small shingle beach  NB this is not meant to be an ephemeral pool | * PRIORITISE (not completed last year) – dig out pond to greater depth and clear reeds back. If possible, dig channel through to IL to allow top ups when IL levels high * Clear excess vegetation and grass in pebbly area leading to pond (see also 5B) | Sep 19  Nov 19 |
| **2A**  **2A cont.** | **Marsh around inner lake**  Reed dominated edge from opposite gatehouse main window extending along the north, west south lake boundary up to and including the area in front of the east hide and along the wall of the inner lake recirculation bed to the inner lake recirculation input point in front of the large compost heap | * Review area of marsh vegetation in front of veranda and next to fence by toilets. Vegetation had started to infill bare mud exposed in spring/ summer 19 during low water levels but was covered after August 18 top up * Cut reeds/marsh vegetation in front of west hide * Cut back vegetation in front of east hide * Cut strip of reeds along back of section between the 2 bird hides (reeds nearest grassland to prevent spread into grassland) * Clear excess vegetation (mostly Flowering Rush) filling in channel area to left of west hide in front of bridge. * Coppice alder and willow in reed area by concrete wall to right of east hide (URGENT – not completed last year and alders getting big) * Cut down self-seeded alders at back of reedbed in small area beyond bridge (near west hide)? * Cut corner of marsh by bridge to allow Marsh Marigold to flower in spring.      * Clear vegetation in whole of area where recirculation stream used to flow down (on pebbles and in water) and dig out encroaching reed roots to leave clear channel to water. * Remove bramble and cut area of marsh/grassland mix to left along first part of inner boardwalk, continuing behind willow fencing up to coppice area. **Review** larger lone trees in this area – pruning or coppicing? * Store and dry taller cut reeds in bundles and stack on small shingle beach * Cut back tops of reeds blocking views from hides in late spring/early summer as required | Autumn/winter 19/20  Summer 20 |
| **2B** | **Marsh around outer lake boardwalk**  Terrestrial/aquatic boundary area to right of outer boardwalk from outer lake corner in front of gatehouse extending all the way to the outer lake bridge and including the edge area on far side of bridge plus edge area to left of outer boardwalk as you enter alder carr area | * Cut back areas of reeds and reedmace encroaching across areas of narrow section between OL inlet and area opposite playground * Cut reeds/vegetation by gatehouse on right hand side of boardwalk in corner (not completed last year) * Remove bindweed and cut reeds at left hand side of boardwalk near start of alder carr (not completed last year) * Reedbed between boardwalks –remove alder seedlings and re-dig out channels to allow better water flow * Remove bindweed and cut marsh vegetation either side of bridge to GMV Oval Square (not completed last year). Coppice/pollard willows and cut back branches growing into water on right hand side. * All of above – bundle taller reeds and stack on small SB. Chop and compost rest. | Autumn/winter 19/20 |
| **2C** | **Reedbed – outer lake path**  Area of reedbed at far southern corner of outer lake adjacent to public foot path and extending along to and opposite pond dipping area | * No management |  |
| **2D** | **Outer lake inlet**  Area at eastern most corner of outer lake adjacent to yacht club, from flowing outlet into lake channel | * Cut back vegetation in first part of channel and on bankside up to tree level. Dig or chrome out as much reed root as possible in narrow section to maintain water flow (though flow not working). * Cut area around corner into long narrow section of OL to maintain water flow into inlet | Autumn 19 |
| **2E** | **Pond dipping area**  Area of outer lake in front of and adjacent to wooden dipping platform accessible via double gates on eastern side of inner lake boardwalk | * Weed out excess Goat’s Rue on banksides where necessary | Sep 19 onwards |
| **3A**  **3A cont.** | **Alder Carr**  Wet woodland incorporating artificial streams and glade, dominated by alder trees and bisected by outer lake boardwalk, south-eastern side of park | * Weed bindweed and clear excess bramble from area at start or carr nearest gatehouse and area near bridge to oval square * Pull out nettles and cut rest of vegetation in meadow glade area at front of trees and remove cuttings to compost heap. Maintain open glade area by compost bins. Turn over compost bins (if no wasp nest present!) * Cut back low overhanging branches over glade area and over boardwalks and public path * Clear out excess debris from streams especially at ends of streams where they meet the lake and in deepened areas where frogs spawn, retaining Marsh Marigold. Deepen all streams where no continuous flow and maintain/recreate spawning areas. * Neaten hedge barrier at edge of carr with hard path by laying hedge shrubs and pruning others. Repair and replace low woven willow fence as appropriate * Review further thinning especially in area of mixed species to allow space for oaks and birch to grow on. Thin alders elsewhere. Selective pollarding of larger willows by tree surgeons. * Ensure streams are flowing in Feb 19 when frogs spawn * Weekly tree safety checks * Monitor spread of phytophthora, remove and or treat. Any timber removed to be burnt off site. Any tools used to with diseased timber to be sterilised * Monitor ash trees for disease * Monitor for oak processionary moth caterpillars | Sep 19  Sep/Oct 19  Autumn 19  Jan/Feb 19  Feb/March 19  All year |
| **Willow bed 1** | **Gatehouse to first pier**  Willows either side of inner lake boardwalk along the stretch from the gatehouse to the inner lake pier, including willows behind 6A meadows and willow at first left corner of inner boardwalk | * Selective coppicing of nursery section to left of 1st part of boardwalk for wreath making, leaving some cover. Coppice alder and grey willow at edge of boardwalk left last year. * Selectively coppice willows at back of each meadow section along bank of OL and cut down self-seeded alders * Coppice any larger willows where likely to overhang boardwalks * Prune and re-shape larger *prunus* shrub and other shrubs around previous willow hearts at back and far end of first meadow section (Prunus pruned last year but other shrubs not cut back). * Improve arch across IL boardwalk with Grey Willows in first section by binding in any new growth. | Nov 19 – Feb 20 |
| **Willow bed 2** | **Pier to pond dipping platform**  Willows along outer lake inner edge from inner pier to dipping platform incorporating willows around bat tower and willows at rear of triangle meadow to right of platform | * Review willows at back of triangle meadow in line with future plans for possible boardwalk across lake from new visitor centre * Selectivecoppicing and pruning of willows and alder in thick area of growth between pier and bat tower (behind pool) - concentrate on opening up edge of outer lake (not completed last year) * Prune back larger alders either side of pier. * Remove self-seeded alders along shoreline. * Prune tops of large sea buckthorn at lake edge but maintain screen from playground in southern park | Dec 19 – Feb 20 |
| **Willow bed 3** | **Pond dipping platform to outer lake inlet**  Willows along outer lake edge from dipping platform incorporating willow along recirculation bed right side and around far end of recirculation bed | * Selective coppicing of area behind recirculation wall (not coppiced last year). Cut down self-seeded alders along edge of outer lake. **Note – review re Willow Emerald Damselfly which lay eggs on branches overhanging lake** * Cut back growth from tops of living willow fence along boardwalk leading to east hide * Vigorously weed bramble, especially over newt hibernacula and where violets grow | Dec 19 – Feb 20 |
| **Willow bed 4** | **Deadwood area**  Willows among standing deadwood at rear side of walk-in meadow | * Weed excess bramble especially in area around bee hotels etc where meadow plants grow * Selective coppicing of larger willows at the front edge with boardwalk where overhanging (or will overhang next year if left) * Retain elder and guilder rose but prune back from edge of boardwalk * Review deadwood features for safety and remove broken bee tower. Add to standing deadwood/deadwood features where needed | Dec 19 – Feb 20 |
| **Willow bed 5** | **Adjoining west hide**  Willows either side of boardwalk approach to hide, bridge side and small pond side | * Cut willow stems growing from fence poles along right hand side of boardwalk leading to west hide * Coppice willows in grassland area * Selectively coppice willows growing around the small pond edge and for wreath making materials | Nov 19 – Feb 20 |
| **Willow bed 6** | **Adjoining east hide (to left)** | * **Review** area re any pruning needed for dangerous branches on taller willows and coppicing of any struggling willows near reedbed * Coppice willows blocking views from left side of hide | Dec 19 – Feb 20 |
| **Willow bed 7** | **Adjoining office** | * Pollard to maintain at manageable height | Jan/ Feb 20 |
| **Willow bed 8** | **Start of outer lake boardwalk** | * URGENT - selectively coppice willows especially near boardwalk (not completed last year) * Remove or coppice self-seeded alders * Cut long grass area among trees and remove bramble | Dec 19 – Feb 20 |
| **4A** | **Hedgerow top edge**  Hedgerow along top west/northerly edge of park bordering main shingle beach | * Remove buddleja * Prune down shrubs to maintain denser growth and selectively coppice willow (not completed last year) * Remove or prune back shrubs encroaching onto shingle beach areas. | Dec 19 - Feb 20 |
| **4B** | **Hedgerow end fence**  Hedgerow at west end of park adjacent to yacht club | * Cut top of hedgerow plants to encourage denser growth and prune back some shrubs to allow easier access to remove * Remove buddleja | Dec 19 – Feb 20 |
| **5A** | **Main shingle beach**  Large sloping beach area below 4A hedgerow and adjacent to west/north edge of inner lake. Slopes down into 6D meadow strip. | * Clear large areas of beach, targeting areas not cleared last year or problem areas with excess bramble or shrub encroachment. Target far end of beach. Collect any wasp spider egg sacs in areas being cleared and move to long grass areas * Sow yellow rattle seeds after clearing in areas where grass a problem * Retain as many rosettes of Viper’s Bugloss as possible in all areas * In remaining areas, weed/dig out problem species only – Canadian fleabane, bramble, shrubs, goat’s rue * Move larger rocks in meadow areas back up the shingle slope. * Remove self-seeded shrubs encroaching from hedgerow at top edge – if unable to dig out fully, cut off roots as deep as possible and re-cut in spring when re-growing * Improve reed fence in wilderness area. Top off and cut back shrubs in wilderness. * **Review** honey bee hives and bee box provision * Remove Goat’s Rue and bramble from all areas of beach where possible | Autumn/winter 19/20  Spring 20 – cut back any shrubs re-growing near hedgerow/top of beach  Spring/summer 20 |
| **5B** | **Shingle Beach by small pond**  Comparatively smaller beach area between the two hides adjacent on the left to inner boardwalk as you approach east hide. Borders 6C and leads down to small pond. | * Selectively clear beach targeting grass, bramble and canadian fleabane **but retain trefoils/black medick** * Continue to store cut reeds here in stack but keep area tidy and contained | Oct/Nov 19 |
| **5C** | **Beach on outer lake**  Inner shore line of outer lake either side of inner pier accessible via lines of desire of 6A meadow and willow at rear of meadow by bat, bird, bug post | * Open up banks by hand pulling taller and invasive plants and digging or pulling out alder tree saplings or cutting down larger alders. * Maintain log piles for fungi and add extra piles | Autumn/winter 19/20 |
| **5D** | **Spit**  Sausage shaped raised island on inner lake west north edge | * Cut taller vegetation and dig out bramble, goat’s rue. Coppice or remove self-seeded willow and alder. * Clear any re-growth in channel between spit and shoreline that was dug out last year | Sep/Oct/Nov 19 |
| **6A** | **Meadow – Gatehouse to first pier**  Comprises two summer meadow sections to right of inner boardwalk between gatehouse and inner pier | * Cut half of each meadow area (opposite to last year, this year do half nearest Gatehouse in each section), removing brambles first. Remove cuttings to compost bin. Leave other halves as longer areas but weed problem species such as goat’s rue, reeds and bramble. * Control any ingress of coppice/hedgerow plants into meadow and dig out spreading dogwood * Cut areas left uncut in early spring if needed * Control Goat’s Rue and bramble by cutting back regularly and digging out Goat’s Rue in spring/summer | Oct 19  April 20  Spring/summer 20 |
| **6B** | **Meadow by signboard / walk-in meadow**  Central meadow accessible to public incorporating reed huts, very small guarded pond etc. Also includes meadow triangle on other side of boardwalk. | * Repair/improve minibeasts habitats. * Improve area of logs at back for minibeast hunts. * Weed large bindweed from back of meadow. * Cut longer meadow vegetation and remove cuttings to compost heap. * Remove cover and clear out little pond. Top up with OL water * Weed bramble and dig out shrubs from triangle meadow and then cut vegetation. * Cut small patch further up near OL edge (behind fence) and cut/dig out alders and shrubs (not completed last couple of years – now very overgrown) * Re-shape willow dome and weave in or cut back growth. Weave in/prune wild roses and clematis. (NB work hlated last year due to robin’s nesting so **carry out work earlier in winter this year**) * Top up little pond with OL water as necessary | Sep 19 (part of BGW event)  Autumn 19  Dec 19  Spring 20 |
| **6C** | **Grassland by east hide**  Mixed grass/meadow area between two hides at back of small shingle beach | * Reduce large bramble patch in corner and prune back large wild roses. Weed excess bramble among vegetation * Control spread of reeds across grass area/meadow area by cutting back strip where reedbed joins meadow ( also detailed in 2A) – NB not completed last year * Coppice or dig out all lone willows and dogwood (not all completed last year). Prune tops of large hawthorns. | Sep/Oct/Nov 19  Dec 19 – Feb 20 |
| **6D** | **Shingle beach shore**  Meadow area incorporating damp to dry meadows at base of main shingle beach forming long strip adjacent to inner lake west/north shore. Cockleshell path runs through the middle along its length. | NB Large wasp nest in stepped area near gatehouse end   * Cut taller vegetation on left hand side of path (with back to gatehouse). Selectively cut tall vegetation on right hand side, retaining longer areas as cover for winter birds – target bramble problem areas and those uncut last year, plus area in front of spit where centaury grows. * Remove bramble and self-seeded shrubs. * Collect wasp spider egg sacs to put back in uncut areas. * Control Goat’s Rue by digging out where possible in spring and pulling in summer | Oct 19  Spring/summer 20 |
| **Top up system beds** | Redundant top up system has shingle/pebble areas at each end and grass channels along top of 5A shingle beach  Former nursery area near gatehouse contains large sewage storage tanks | NB Area under review re mitigation plans for Plot 201   * Clear debris and wood on pebble area nearest gatehouse * Weed grass channels of invasive species and cut grass/vegetation short with shears * Clear bramble from pebble area at far end where beehive is sited but retain toadflax. **Remove dead hedge by hives.** * Maintain clear, safe access to hive, including steps up from compost area. * Add wall habitats to new wooden toolstore on pebble area? | Autumn 19  Jan 20 when bee activity dies down  Spring/summer 20  Jan/Feb/March 20 |
| **Recirculation system beds** | Raised concrete structure at end of IL near east hide comprising deep pool at end nearest hide and filter reedbed | * Clear some of vegetation build up in deep pool and reduce water lilies? * Maintain shingle habitat. Remove bramble and shrubs from recirculation bed. Reduce grass clumps if needed. * Review use of area re GMV development shading of marsh behind if short term mitigation needed | Autumn 19  Winter 19/spring 20 |
| **Tern rafts** | 5 on IL – 2 larger, 3 smaller   1. smaller rafts on OL | NB Under review as part of Plot 201 mitigation – possibility of replacements/additions   * IL rafts - clear of vegetation and gravel, clean down, replace gravel and reposition rafts. * OL rafts – as above | **Early** March 2020 |
| **Kingfisher tunnel** | Sandbank and concrete tunnel built into side of recirculation bed – currently unused | * Do not maintain. Tunnel unlikely to be used due to positioning (easy access for predators) and damage (foxes digging into sandbank) * Position branches as kingfisher perches near hides and viewpoints. | Autumn 19 |
| **Bat tower and boxes** |  | * Replace broken and add new bat boxes on site * Review siting of bat tower with bat conservation group – box has not been used since construction in 2000. | Autumn/winter 19/20 |
| **Bird boxes** | Numbered or lettered in IL and OL areas | * Check and record nests. Clean out. * Replace damaged boxes and add where needed. | Jan 20 |
| **Bee boxes and Bug houses** |  | * Replace 2 x bug/bee towers that collapsed last year (one in deadwood area/one in walk-in meadow) * Increase box provision and consider where and extra should be positioned to provide nest sites for *Hoplitis adunca* and other solitary bee species*.* | Autumn/winter 19/20 |
| **Bird feeders** | Put up in winter on hawthorn at edge of standing deadwood area near walk-in meadow, opposite triangular meadow | * Put up when natural food becomes scarce * Store food in secure bin in hide to protect from rats * Establish rota for refilling. | From Nov/Dec 19 |
| **Deadwood** | Large standing deadwood placed on site when constructed – now mostly fallen and rotted. | * See also Willow Bed 4 * Move wood stored at edges of IL boardwalk and on shingle areas near ephemeral pool – create new deadwood structures | Ongoing |
| **Green roof** |  | * Cut meadow and remove cuttings to compost heap (with staff, not volunteer team). Weed invasive species and sow yellow rattle seeds | Autumn 19 |
| **Boardwalks** |  | * Check wire on IL boardwalk and repair as necessary * Remove excess moss from between gaps in OL and IL boardwalks * Sweep away fallen leaves and twigs regularly from OL boardwalk in autumn/winter * Cut back overgrown vegetation along both boardwalks * Liaise with LT re replacement of sections and fence/gate repairs | Ongoing  Autumn/winter 19/20  Spring/summer 20  Ongoing |
| **Compost bins and heap** | Large wooden compost bins at top of far end of main shingle beach. Large compost heap at far end of shingle beach near lake edge. | NB Check for wasp nests   * URGENT (not completed last year due to wasp nests) - turn over compost in large heap. Try and maintain smaller compost area here to prevent nutrient leach into IL and maintain structure around heap to contain and improve appearance * Turn compost in the wooden bins (as above – wasp nest prevented work last year) * Burn bramble, bindweed and woody vegetation on river beach. | Autumn/winter 19/20 |
| **Southern Park wildflower edges** |  | * See separate plan |  |
| **River beach** |  | * If time and numbers allow, coppice smaller buddleia at both ends * Liaise with Yacht Club re biodiversity improvements * Burn stored dry materials * Litter pick | As needed  Ongoing |