

HABITAT ACTION PLAN

September 17 – end August 18

COMPART- MENT NO.	COMPARTMENT NAME	ACTION	WHEN
1A	<p>Inner lake NB not including marsh or shingle edges to lakes – see 2 A</p>	<ul style="list-style-type: none"> • Remove old straw bales and compost contents • Full top up in autumn after work completed on reedbeds - using new borehole system. • Continue to review water levels and request top ups when necessary • Review use of barley straw sausages • Remove algae by hand when building up in accessible areas • Monitor any spread of floating duckweed • Monitor for presence of Azolla and treat with weevils if necessary • (see also tern rafts) 	<p>Sep 17</p> <p>Nov 17</p> <p>ongoing</p> <p>Spring 18</p>
1B	<p>Outer lake NB not including marsh or shingle edges to lakes – see 2A – E and 5C</p>	<ul style="list-style-type: none"> • Continue to review water levels and request top ups when necessary – using new borehole system. Keep topped up to 5.6 mark throughout year when possible to maintain water levels in streams and pond dip area • Monitor for Azolla. • Regular litter pick • (see also tern rafts) 	ongoing
1C	Streams	<ul style="list-style-type: none"> • Now part of 3A ALDER CARR 	
1D	<p>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</p>	<ul style="list-style-type: none"> • Remove most self seeded plants from pebble area, especially grass and bramble, and cut meadow edge to side. Target bramble in pebbly areas. • 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 • Sow Viper's Bugloss seeds in pebbly/sandy areas for <i>Hoplitis adunca</i>. • If piles of brash and cut willow are stored here for shredding over winter, clear by early March 18 	<p>Autumn 17 and review in spring</p> <p>March 18</p>

<p>1E</p>	<p>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</p>	<ul style="list-style-type: none"> • Cut reeds back along edges and dig out reed roots in pond. Deepen an area at the back closest to west hide by digging out to maintain pool of water especially during summer (pool now dries out in summer). • Clear excess vegetation and grass in pebbly area leading to pond (see also 5B) 	<p>Autumn 17</p>
<p>2A</p>	<p>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</p>	<ul style="list-style-type: none"> • Cut patch of vegetation in front of veranda and next to fence by toilets. • Cut back marsh vegetation in front of west hide and along back of section between the 2 bird hides (reeds nearest grassland to prevent spread). • Dig out vegetation filling in channel area to left of west hide in front of bridge. • Cut back vegetation in front of east hide but leave reeds growing in front of concrete wall. • Cut down alder and willow in reed area by concrete wall to right of east hide • 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). Dig out reed roots where spreading across this area. • Cut area of marsh/grassland mix behind fence along first part of inner boardwalk to left up to willow tree area. Review larger lone trees in this area – pruning or coppicing? • Store and dry cut reeds in bundles and stack on small shingle beach but remove old reeds here first • Cut back tops of reeds blocking views from hides in late spring/early summer as required 	<p>Sep/Oct/Nov 17</p> <p>Summer 18</p>
<p>2B</p>	<p>Marsh around</p>	<ul style="list-style-type: none"> • Cut reeds/vegetation by gatehouse on 	<p>Sep/Oct/Nov 17</p>

	<p>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</p>	<p>right hand side of boardwalk in corner</p> <ul style="list-style-type: none"> • Remove bindweed and cut reeds at left hand side of boardwalk near start of alder carr. • Reedbed between boardwalks – no cutting but remove alder seedlings and re-dig out channels to allow better water flow • Remove bindweed from areas either side of bridge to oval square • Cut vegetation in area by bridge to village square on right hand side. Review willows growing here (part of 3A) as growing across water and reedbed at low level. • All of above – bundle taller reeds and stack on small SB. Chop and compost rest. 	
2C	<p>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</p>	<ul style="list-style-type: none"> • Remove self seeded trees and shrubs from reeds and wall edges (including birch, alder and buddleia) 	Sep 17
2D	<p>Outer lake inlet Area at eastern most corner of outer lake adjacent to yacht club, from flowing outlet into lake channel</p>	<ul style="list-style-type: none"> • 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). • Dig channel through reed and reedmace in corner through to open water. Cut front of reed/marsh section in deeper water area. • Maintain dead spiky shrub screen along wall to deter access 	Sep/Oct/Nov 17
2E	<p>Pond dipping area Area of outer lake in front of and adjacent to wooden dipping platform</p>	<ul style="list-style-type: none"> • Cut vegetation at sides in preparation for winter building works on new building 	Sep/Oct/Nov 17

	accessible via double gates on eastern side of inner lake boardwalk		
3A	Alder Carr Wet woodland incorporating artificial streams and glade, dominated by alder trees and bisected by outer lake boardwalk, south-eastern side of park	<ul style="list-style-type: none"> • Weed bindweed from areas where a problem – especially first section nearest gatehouse and area near bridge to oval square • Cut grass in meadow glade areas 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 grassland strip along outer edge with hard path. Remove bindweed first. Re-seed stretch from bridge where excessively cleared last summer • Cut back low overhanging branches 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. • Maintain hedge barrier at edge of carr with hard path by laying hedge shrubs, pruning others and adding shrubs as appropriate. Repair and replace low woven willow fence as appropriate • Thin trees in area of mixed species to allow space for oaks and birch to grow on. Thin alders elsewhere. Selective pollarding coppicing of willow. • Prune tops of taller elder within trees • Trim back overgrown edges to hard path where necessary and remove bindweed. • Liaise with CElect to keep stream flows working • Weekly tree safety checks • Monitor spread of phytophthora, remove and or treat. Any timber removed to be burnt off site. Any tools 	<p>Sep 17 and review again in spring/summer</p> <p>Sep 17</p> <p>Oct/Nov 17</p> <p>Sep 17 onwards</p> <p>Dec 17 – Feb 18</p> <p>Spring/summer 18</p> <p>NB Important from Feb 18 onwards for frogs spawning</p> <p>Ongoing</p>

		<p>used to with diseased timber to be sterilised</p> <ul style="list-style-type: none"> • Monitor ash trees for disease 	
Willow bed 1	<p>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</p>	<ul style="list-style-type: none"> • Selective coppicing of nursery section to left of 1st part of boardwalk for wreath making, leaving some cover. • Selectively coppice smaller willows in front row behind both sections of meadow for wreath making. • Coppice larger purple willow and osier in first section to right of boardwalk just past grey willow arch. • Prune <i>prunus</i> shrub at far end of first meadow section. Remove encroaching dogwood and cut back dogwood and hawthorn heart at back of first meadow area. • Pollard remaining fence stump (now massive tree) in area in corner behind fence to left of boardwalk. • Maintain arch across IL boardwalk with Grey Willows in first section by binding in any new growth. 	Dec 17 – Feb 18
Willow bed 2	<p>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</p>	<p>PRIORITY</p> <ul style="list-style-type: none"> • Coppice around pond dipping platform in preparation for new building works. Fell closest tall white willow to platform. • Selective coppicing 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. • Prune larger alders either side of pier. • Remove excess bramble especially where spreading into other habitats. • Remove self seeded alders along shoreline. • Prune tops of large sea buckthorn at lake edge but maintain screen from playground in southern park 	Dec 17 – Feb 18
Willow bed 3	<p>Pond dipping platform to outer lake inlet Willows along outer lake edge from dipping platform incorporating willow along recirculation bed</p>	<p>MAIN COPPICE AREA</p> <ul style="list-style-type: none"> • Coppice around pond dipping platform in preparation for new building works • Selective coppicing of rest of area leading to east hide (to right of boardwalk) and round up to outer lake inlet, targeting larger willows but maintaining screen from GMV building works. • Coppice large willow close to east hide 	Dec 17 – Feb 18

	right side and around far end of recirculation bed	<p>to right left partially cut last year and any others overhanging the deep pool.</p> <ul style="list-style-type: none"> • Prune or weave in growth from tops of living willow fence along boardwalk leading to east hide • Remove large buddleja near recirculation pool edge • Remove Sycamore in area behind recirculation pool • Weed bramble, especially over newt hibernacula and where violets grow • Plant shrubs in clear area at back of recirculation pool where willows have died off (use shrubs dug out from other habitats) 	
Willow bed 4	Deadwood area Willows among standing deadwood at rear side of walk-in meadow	<ul style="list-style-type: none"> • Weed bramble • 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 • Maintain standing deadwood/deadwood features 	Dec 17 – Feb 18 Ongoing
Willow bed 5	Adjoining west hide Willows either side of boardwalk approach to hide, bridge side and small pond side	<ul style="list-style-type: none"> • Pollard large Osiers to left of west hide (consider whether job for tree surgeon) and coppice other willows here • Prune lower branches of large standard willow where overshadowing small pond. • Coppice smaller willows at front edge with pond for wreath making • Remove self seeded alders, leaving current large alder standard at edge by boardwalk 	Dec 17 – Feb 18
Willow bed 6	Adjoining east hide (to left)	<ul style="list-style-type: none"> • 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 16 – Feb 17
Willow bed 7	Adjoining office	PRIORITY <ul style="list-style-type: none"> • Pollard trees between office and nursery area – need good access to this area for new storage hut, CCTV and wood store 	Dec 17 – Feb 18
Willow bed 8	Start of outer lake boardwalk	<ul style="list-style-type: none"> • Selectively coppice willow – target trees growing over boardwalk • Remove or coppice self seeded alders • Cut dead alder to safe height and leave 	Dec 17 – Feb 18

		<p>stump as standing deadwood</p> <ul style="list-style-type: none"> • Cut long grass area among trees and remove bramble 	
4A	<p>Hedgerow top edge Hedgerow along top west/northerly edge of park bordering main shingle beach</p>	<p>PRIORITY</p> <ul style="list-style-type: none"> • Coppice grey willow along edge of top up bed at far end near beehives • Remove buddleia • Prune back shrubs to maintain denser growth and coppice willow • Remove shrubs encroaching onto shingle beach areas. 	Dec 17 – Feb 18
4B	<p>Hedgerow end fence Hedgerow at west end of park adjacent to yacht club</p>	<ul style="list-style-type: none"> • Cut top of hedgerow plants to encourage denser growth and prune back some shrubs to allow easier access to remove • Coppice grey willows at front edge • Remove buddleja 	Dec 17 – Feb 18
5A	<p>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.</p>	<ul style="list-style-type: none"> • Clear large areas of beach, targeting areas not cleared last year or problem areas with excess bramble or shrub encroachment. • Autumn sow yellow rattle seeds after clearing • Retain as many rosettes of Viper's Bugloss as possible in all areas • In remaining areas, weed 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. • Improve reed fence in wilderness area. Top off and cut back shrubs in wilderness. • Review bee box provision with David Notton and add more further down shingle beach? • Remove Goat's Rue and bramble from all areas of beach where possible 	<p>Sep/Oct/Nov/Dec 17 and Jan/Feb/Mar 18</p> <p>Late winter/early spring</p> <p>spring/summer 18</p>
5B	<p>Shingle Beach by small pond Comparatively smaller beach area between the two hides adjacent on the left to inner boardwalk as you approach east</p>	<ul style="list-style-type: none"> • Clear beach thoroughly and remove all grass roots, including stretch leading to pond • Store cut reeds here in stack but keep area tidy and contained • Autumn sow Viper's Bugloss in shingle area to increase amount of this species for <i>Hoplitis adunca</i>. • Review bee box provision with David Notton 	Oct/Nov 17

	hide. Borders 6C and leads down to small pond.		
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	<ul style="list-style-type: none"> • Open up banks by hand pulling taller and invasive plants and digging or pulling out alder tree saplings. • Maintain log piles for fungi and add extra piles 	Sep/Oct/Nov 17
5D	Spit Sausage shaped raised island on inner lake west north edge	<ul style="list-style-type: none"> • Cut taller vegetation and dig out bramble, goat's rue and self seeded willow and alder 	Sep/Oct/Nov 17
6A	Meadow – Gatehouse to first pier Comprises two summer meadow sections to right of inner boardwalk between gatehouse and inner pier	<ul style="list-style-type: none"> • Cut half of each meadow area (opposite to last year, this year do half <u>nearest</u> 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 • Review and cut areas left uncut in spring if necessary • Control Goat's Rue and bramble by cutting back regularly and digging out Goat's Rue in spring 	<p>Sep/Oct 17</p> <p>Spring 18</p> <p>Spring/summer 18</p>
6B	Meadow by signboard Central meadow accessible to public incorporating reed huts, very small guarded pond etc. Also includes meadow triangle on other side of boardwalk.	<ul style="list-style-type: none"> • Remove reed and willow debris from old dens and den building. • Re-seed bare area of meadow where large den was situated and fence off area while growing back • Weed large bindweed from back of meadow • Weed bramble and prune back wild roses • Cut longer meadow vegetation and remove cuttings to compost heap. • Weed bramble and dig out shrubs from triangle meadow and then cut vegetation. Cut small patch further up near OL edge (behind fence) and 	<p>Sep/Oct 17</p> <p>Keep area under review re possible viewing platform build.</p>

		<p>cut/dig out alders and shrubs.</p> <ul style="list-style-type: none"> • Repair/improve minibeasts habitats. • Maintain areas of logs at back for minibeast hunts. Put up “Do not Disturb” signs from November when newts hibernating • Reduce large stick pile at back of meadow – cut up longer sticks and move some to woodland area behind • Tidy little pond and remove excess vegetation as necessary. • Weave in new growth in willow dome • Cut all tall stems of living willow chair • Cut back taller dogwood shrubs at back of meadow to remove shade form habitat tower 	<p>Sep/Oct/Nov 17</p> <p>Dec 17 – Feb 18</p>
6C	<p>Grassland by east hide Mixed grass/meadow area between two hides at back of small shingle beach</p>	<ul style="list-style-type: none"> • Control spread of bramble patch by fence to east hide 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 (detailed in 2A) • Coppice or dig out all lone willows and dogwood. Review large hawthorns – prune or remove one? 	<p>Sep/Oct/Nov 17</p> <p>Dec 17 – Feb 18</p>
6D	<p>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.</p>	<ul style="list-style-type: none"> • Cut far end of meadow first to allow access to compost heaps. Remove bramble and cut back gorse. Cut nettles and clear step access to bee area. • Cut the length of the meadow area on left hand side of path and remove cuttings to compost heap. Remove as much bramble as possible before cutting. • Cut some areas of longer vegetation areas on right hand side, targeting areas previously uncut or with excess bramble, leaving large areas uncut at front with lake as cover for birds • Weed out bramble, prune wild roses back and dig out self seeded shrubs in all areas. Cut pampas grass right back. • Control Goat’s Rue by digging out where possible in spring and pulling in summer 	<p>Sep 17</p> <p>Sep/Oct/Nov 17</p> <p>Spring/summer 18</p>

Top up system beds	<p>Redundant top up system has shingle/pebble areas at each end and grass channels along top of 5A shingle beach</p> <p>Former nursery area near gatehouse contains large sewage storage tanks</p>	<ul style="list-style-type: none"> • Weed grass channels of invasive species and cut grass/vegetation short with shears • Clear bramble from pebble area at far end where bee hive is sited but retain toadflax. Move dead hedge over to increase clear area by hives. • Maintain clear, safe access to hive, including steps up from compost area. • Clear all vegetation in pebble area of nursery bed. Remove trees planted in this area previously as screen • Clear debris and wood on pebble area – book skip? • Put up wooden hut (from meantime) on pebble area and sort storage for tools, pond dipping equipment etc 	<p>Sep/Oct/Nov 17</p> <p>Dec 17 when bee activity dies down</p> <p>spring/summer 18</p> <p>Oct/Nov 17</p> <p>Book EADs with meantime (autumn/winter)</p>
Recirculation system beds	<p>Raised concrete structure at end of IL near east hide comprising deep pool at end nearest hide and filter reedbed</p>	<ul style="list-style-type: none"> • Maintain as shingle habitat. Remove bramble and shrubs from recirculation bed • Remove buddleja • Monitor deep pool for signs of becoming overgrown/silting up due to lack of water flow. Manage vegetation as necessary 	<p>Oct 17 – Feb 18</p> <p>Ongoing</p>
Tern rafts	<p>5 on IL – 2 larger, 3 smaller</p> <p>7 smaller rafts on OL</p>	<ul style="list-style-type: none"> • IL and OL rafts - clear of vegetation and gravel, clean down, replace gravel and reposition rafts. IL rafts are priority. NB OL rafts not cleaned last year • Review positioning of rafts in IL and addition of new rafts from meantime 	<p>Early March 2018</p>
Kingfisher tunnel	<p>Sandbank and concrete tunnel built into side of recirculation bed – currently unused</p>	<ul style="list-style-type: none"> • 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. 	<p>Dec 17 – Feb 18</p>
Bat tower and boxes		<ul style="list-style-type: none"> • Review siting with bat conservation group – box has not been used since construction in 2000. • Review other bat boxes on site 	<p>Winter 17</p>
Bird boxes	<p>Numbered or lettered in IL and OL areas</p>	<ul style="list-style-type: none"> • Check and record nests. Clean out. • Replace damaged boxes. 	<p>Dec 17/Jan 18</p>
Bee boxes and Bug		<ul style="list-style-type: none"> • Review condition and repair where necessary 	<p>Autumn/winter 17/18</p>

houses		<ul style="list-style-type: none"> • Increase box provision and consider where and extra should be positioned to provide nest sites for <i>Hoplitis adunca</i> and other solitary bee species. 	
Bird feeders	Put up in winter on hawthorn at edge of standing deadwood area near walk-in meadow, opposite triangular meadow	<ul style="list-style-type: none"> • 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 17
Deadwood	Large standing deadwood placed on site when constructed – now mostly fallen and rotted.	<ul style="list-style-type: none"> • See Willow Bed 4 	Ongoing
Green roof		<p>PRIORITY</p> <ul style="list-style-type: none"> • Cut meadow and remove cuttings to compost heap (with staff, not volunteer team). Weed invasive species and sow yellow rattle seeds 	Oct 17
Boardwalks		<ul style="list-style-type: none"> • 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 	Ongoing Autumn/winter 17/18 Spring/summer 18
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.	<ul style="list-style-type: none"> • 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 • Add this year's cuttings to wooden compost bins where possible. Add any excess cuttings to remaining compost in large heap at end of shingle beach but chop up first. Burn bramble, bindweed and woody vegetation on river beach. • Turn over compost in bins. Add some of top layer of main compost heap to bins if space allows. 	Oct 17 Autumn/winter 17/18 April 18
Southern Park wildflower edges		<ul style="list-style-type: none"> • Liaise with Land Trust re any work planned to restore these areas. 	Autumn 17

River beach		<ul style="list-style-type: none">• If time and numbers allow, coppice smaller buddleia at both ends• Burn stored dry materials• Litter pick	Winter 17/18 Ongoing
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