Bromley Biodiversity Plan 2015 – 2020
APPENDIX E:

Best Practise Guidelines for Land Managers

Land managers have the responsibilities and costs associated with land management; however they also have the most power to benefit wildlife through the way they maintain their sites.

Getting started

- **Survey your site**. Have an ecological survey done or search your local records office or the NBN Gateway for existing wildlife records. Contact local wildlife groups and encourage them to send you records and notify you of new findings. Rare or unusual species will help to indicate the most sensitive areas. The presence of certain species (e.g. invasive non-native plants) may indicate where additional management is required.
- **Control public access**. If your site is open to the public, consider where you will allow the public to go and where not. This is important not just for security, but for protecting sensitive habitats. Maintain official paths in good condition to deter the formation of unofficial paths and for site safety.
- **Know the law**. There is legislation in place regarding land management practises. Ensure you have up to date information relevant to issues on your site such as protected species, felling licenses, common land, pesticide use etc.
- **Follow a management plan and update as necessary**. For SSSIs the management plan must be agreed with Natural England. Most habitats develop over years or decades. A management plan allows the land manager to plan ahead and allows for continuity of management following a change of personnel.
- **Tree safety.** Survey trees near official paths and boundaries at least once a year and maintain in a safe condition.
- **Get advice**. If in doubt, seek further advice from the local authority, government organisations such as Natural England, the Forestry Commission, the Environment Agency and DEFRA, or third sector wildlife and conservation bodies, such as the local Wildlife Trusts.

Woodland Management Guidelines

- All woodland work must take place outside the nesting/breeding bird season (October-February/March).
- Manage the woodland so as to ensure a mixed age structure, species diversity and valued wildlife habitat for example by coppicing, thinning and retaining dead wood.
- Aim for at least 10% scrub cover of species such as Hazel, Hawthorn, Blackthorn, Dog Rose, Wild Privet, Wayfaring Tree, Dogwood, Crab Apple, Elder, Goat Willow or Guelder Rose.

- Control the growth of non-native species or, if possible, remove them.
- Do not introduce garden plants or non-native species into woodland.
- Maintain open features, such as rides, glades and scalloping of woodland edges.
- Unless a safety hazard, retain any standing or fallen dead wood as habitat for invertebrates, hole dwelling birds, small mammals etc.
- Where possible, create tightly packed log piles, in both shady and sunlit areas avoiding areas of important ground flora. They provide additional habitat for fungi and invertebrates; refugia and hunting grounds for small mammals, reptiles and hibernating amphibians.
- Do not add nutrients such as fertilisers, organic manures or waste materials to woodland soil.
- Avoid disturbance or compression of woodland soils e.g. by heavy machinery.
- Use fires only for essential burning of brash and cuttings, reusing existing fire sites wherever possible. Where possible use raised structures to avoid burning directly on the ground (e.g. metal sheeting raised up by bricks or logs). Avoid locating fires within 10m of the canopy or near areas of woodland flora that indicate an ancient site.
- All new tree plantings should be of native and local provenance.
- Favour natural regeneration over restocking where possible (ground flora or trees).
- Retain mature growth of ivy on trees, except where it is growing along large tree branches and causing them to become unsafe.
- Maintain or reinstate coppicing cycles where appropriate.
- Maintain paths and encourage people to keep to them – trampling on sensitive woodland flora will kill it.
- Promote buffer zones around semi-natural ancient woodland to protect from damage.
- Introduce protective measures where significant grazing or browsing occurs (e.g. deer).
- Identify opportunities for linking existing woodland areas and utilise them, for example, through the planning system.
- Survey and monitor woodlands. Send records to GiGL/BARS and make information available to site managers and Friends Groups, including protected species such as dormice, bats, great-crested newts etc.

Management of Ancient Trees

N.B. Management of ancient trees is very difficult and requires advice from highly skilled experts.

- Have trees assessed regularly and monitor their surroundings.
- Use arborists or contractors experienced in ancient tree management for required works.
- Pollarding is a traditional method of tree management that may be suitable for ancient trees, but requires expertise to be carried out correctly.
- Make sure any ancient trees have been registered on the Woodland Trust's Ancient Tree Inventory at www.ancient-tree-hunt.org.uk/

- Re-route footpaths to prevent root compression, this also protects the public in case of branch loss and protects the tree from surgery for health and safety reasons. Tree roots extend **at least** 1-1.5 times as far as the tree canopy reaches. Consider fencing off this area around the tree.
- Try to germinate seeds/nuts/acorns from the ancient tree and plant any resulting saplings elsewhere on your site if there is an appropriate location away from any sensitive habitats.
- Clear encroaching scrub and trees growing in close proximity to ancient trees but note that sudden release from competing trees can shock and damage them so any works must be done **gradually**.

For more information about ancient trees see
www.ancient-tree-forum.org.uk/ancient-tree-forum/

Hedgerow Management Guidelines

The following guidelines apply whether maintaining by hand or using flails/machinery:

- Allow hedges to reach and maintain a minimum height of 2m, and minimum width of 0.75m (from the centre of the hedge).
- Trim hedges between 31st November and 28th February only.
- Trim hedges no more than one year in three. Trimming of the hedge should be rotated to avoid cutting the whole length in the same year.
- Each time the top of the hedge is cut, raise the cutting line about 10cms to prevent a hard knuckle of wood forming at the trim line. The development of a trim line leads to mushroom shaped growth with gaps forming at ground level.
- Only if required, cut the herb layer adjacent to the hedge every other year in autumn/winter and remove dense cuttings. Leave herb layer at least 4cm high and do not expose bare soil.
- Do not use pesticides, fungicides or herbicides at hedge bases.
- Remove hardwood cuttings from the edge of the hedge after trimming.
- Retain all mature growth of ivy on trees where it is safe to do so.
- Retain standing deadwood unless it presents a safety hazard.
- Plant any gaps in the hedge with native species of local provenance.
- Use traditional management techniques such as hedgelaying where possible; hedgelaying can reduce the need for mechanical maintenance and provide additional benefits for wildlife.
- Protect newly-laid hedges from grazing animals.
- Reduce tree branches overhanging and shading the hedge if they are causing die back of hedge plants beneath.
- Remove dumped rubbish and garden waste from hedge bases.
- Survey regularly to inform management.
- Plant new hedgerows (of native species with local provenance) where appropriate to improve links between woodland copses or other hedgerows.
- Encourage public interest and involvement in traditional hedgerow management.

- It is illegal to grub out more than 20m of hedgerow without consent from the local planning authority (**Hedgerow Regulations Act 1997**). (This regulation does not apply to domestic gardens.)

For more information see the leaflet produced by *hedgelink* at:
http://www.hedgelink.org.uk/assets/docs/Hedgelink%20A5%2012pp%20leaflet_7.pdf

Grassland Management Guidelines (for Hay Meadows)

- Cut grass in late-summer or early autumn; aim to achieve a sward height of 2-10cm through the winter and early spring. **Remove all cuttings**.
- When grazing, ensure livestock breeds used are appropriate for the site, and stocking rates are correct for the area being grazed.
- Avoid summer grazing unless at very low stocking rates across large land areas.
- Keep undesirable species under control (less than 5% of the area) e.g. Common Ragwort.
- Avoid ground disturbance of more than 30% of the total grassland area in one year.
- 15-20% of the hay meadow area should be left uncut each year. The area left uncut is known as an 'insect bank' and should be moved every year (there should be an overlap with the previously uncut area).
- Manage scrub boundaries on rotation.
- Before managing grassland as hay meadow, check if any rare plants or grassland fungi are present, some of which may prefer a shorter sward height.
- Areas of bare soil within grassland are important, especially on south-facing slopes, because they provide nesting sites for solitary bees, many species of which are under threat.
- When creating new meadow habitat, survey first to establish soil type and if there are existing wildflower species present. If there is a need to re-seed, use appropriate species, sourced locally (e.g. use hay collected from another local site of the same soil type).
- Do not apply organic manure, pesticides, fungicides or herbicides to the meadow area.
- Survey regularly to inform management.

Lowland Heath and Lowland Valley Mire Management Guidelines

General Guidelines

- Do not apply fertilisers, organic manures or waste materials.
- Control undesirable species e.g. bracken.

Heathland

- Cover of dwarf shrubs should be between 25% and 90%.
- Populations of notable dwarf species such as *Erica sp*. Or *Vaccinium myrtillus* should be maintained.

- Create a wide range of age classes of dwarf shrubs present through cutting and removing a number of small patches of vegetation each year (up to 5% of the land).
- Remove areas of trees and scrub from within the main heathland so that there is no more than 15% cover. Treat cut stumps with herbicide. On SSSIs seek advice from Natural England.
- Control trees and scrub through rotational coppicing of permanent scrub, and cutting and removal of undesirable scrub and trees.
- Restrict the use of fires as far as possible. Re-use existing fire sites.
- When grazing on heathland, ensure the livestock breed is appropriate for the site, and stocking rates are correct for the area being grazed.
- Avoid summer grazing unless at very low stocking rates across large land areas.

Lowland Valley Mire

- Maintain water levels.
- Maintain areas of open water.
- Remove saplings.
- Prevent scrub development.
- Do not use pesticides, herbicides or fungicides of any kind.
- Control invasive plants such as purple moor grass (*Molinia purpurea*), preventing seeding wherever possible.
- Restrict public access but inform public of the sensitivity of this habitat.
- Survey and monitor. Use findings to inform management.

Pond & Wetland Management Guidelines

General Wetland Habitat Guidelines

- Do not use pesticides, fungicides or fertilisers within 6m of ponds, rivers, ditches or wet woodland.
- Promote scrub on selected parts of pond, river and ditch banks as it provides cover and protection for amphibians and small mammals.
- Maintain long grass adjacent to ponds, rivers and ditches as it provides shelter and protection for amphibians and invertebrates.
- Do not intentionally introduce any plants or animals (including fish) to ponds, rivers or ditches.
- Manage any undesirable weed species present.
- Control the spread of invasive and non-native wetland species such as Himalayan balsam, Japanese knotweed and New Zealand pigmy weed.

Pond Management

- Undertake management every two years between September and February to maintain a balance of submerged, floating and emergent vegetation and open water.
- If de-silting becomes necessary, it is best carried out in September when many pond species have completed their life cycles. Only 1/3rd of the pond should have silt removed at any one time, care must be taken not to damage the pond liner and where possible dredged material should be left at the side

of the pond for about 2 days to allow some of the aquatic invertebrates in the silt to return to the pond.

- Silt is very expensive to remove from the site so it may need to be deposited locally, but away from plants of conservation interest and sufficiently far back from the pond to prevent it draining back in.
- After de-silting an overgrowth of algae and duckweed may occur in the pond until the system settles down, because disturbance releases nutrients in the silt into the water. Plants such as water lilies can reduce duckweed and algal growth by shading the water.
- Where a decision has been made to introduce plants such as water lilies, they should be native species of local provenance and must be very carefully checked to make **absolutely certain** that alien plants such as New Zealand pigmy weed (*Crassula helmsii*), parrot's feather (*Myriophyllum aquaticum*), floating pennywort (*Hydrocotyle ranunculoides*) or any other invasive water plant or animal eggs (e.g. signal crayfish) are not introduced.
- If great crested newts are known to be present, seek further advice before undertaking works.
- Do not allow trees to shade more than 25% of the southern pond margins.
- Do not introduce or feed waterfowl on ponds.
- To benefit great crested newts, the land within 200m of a breeding pond must be managed and no new barriers such as buildings, walls, tracks, or footpaths created. Potential hibernation sites such as rabbit burrows, log piles, rocky areas or woodland should be retained.
- Prevent dogs from entering ponds where possible.

Ditch and River Bank Management

- Cut long grass on one side only of ditches each year in autumn, alternating the sides on a 2 year rotation.
- Clear ditches of debris and dead plant matter in winter. Leave dredged matter adjacent to ditches for 24-48 hours to allow any aquatic invertebrates to return to the ditch, then compost debris.
- Take care not to damage the roots of plants growing on ditch and river banks.

Scrub Management Guidelines

- Manage scrubland so that you have a diverse age and height structure. No more than 50% of the scrub should be mature, or over mature.
- Try and follow a rotational scrub management programme. Never manage more than 1/3 of the site in any one year and never completely eradicate scrub from the site.
- Where scrub is invading a species rich hay meadow, scalloping (cutting a wavy edge) on rotation can allow scrub habitat to remain without encroaching the meadow.
- Control all invasive species.
- Do not apply fertilisers, fungicides, pesticides, organic manures or waste materials.
- Avoid ploughing or other cultivation.
- Remove invasive, non-native species e.g. Japanese knotweed.

Gardens and Allotments Management Guidelines

- Retain natural features as far as is practicable e.g. ancient trees, ponds and watercourses, native hedgerows and scrub margins.
- Maintain a 'buffer zone' around such features by allowing grass to grow around it and avoid non-native planting in the vicinity.
- Wherever possible, avoid or reduce the use of pesticides, herbicides and fungicides e.g. slug pellets.
- Promote the use of natural predators (e.g. frogs, hedgehogs, ladybirds) and companion planting.
- Encourage gardeners and allotment holders to create habitat areas within their gardens or allotments, e.g. natural hedgerows, ponds, scrub corners.
- Encourage allotment holders to plant flowers as well as vegetables to attract more natural pollinators (bees, butterflies, beetles).

Churchyards and Cemeteries Management Guidelines

- Grassland – keep grass short where graves are visited and in areas where grassland fungi are present. More remote areas can be left to grow and set seed - 2 cuts a year (spring and autumn) should be sufficient to maintain the open areas. A mown path through longer grassy areas will allow access without trampling the vegetation. To preserve the grassland fungi do not use herbicides or weed killers on the lawns.
- Walls – use lime mortar for repairs; ivy can shade out wall plants, bryophytes and lichens so should be kept in check by cutting; do not weed kill or pull it out of mortar joints
- Gravestones – the lichens and bryophytes growing on gravestones are adapted to the prevailing conditions. Do not re-site the gravestone unless absolutely necessary; do not clean with bleach or other chemicals nor use weed killer around the base of tombs.
- Grass cuttings should be removed from low curbs and ledgers.

Species-specific Management

- *Wall ferns and wall plants*: lime based mortar should be used for repairs.
- *Bats*: roosts are protected by law so if a roost is present always seek advice from Natural England.
- *Fungi*: do not use chemicals on grassy areas.
- *Lichens and bryophytes*: do not remove these with chemicals or hard brushes when trying to read inscriptions. Use a soft brush and water, try an 'inscription rubbing', or use a tube to look at the inscription (see advice from the Family History Society).