Ponds and other waterbodies

Ponds are highly beneficial for wildlife and it is unfortunate that many have disappeared from our countryside. Species such as frogs, toads and newts cannot complete their lifecycle without access to ponds or other standing water. A series of ponds across the golf course will act as stepping stones and enable species to disperse across the local landscape.

Pond in the Weald of Kent © KWT

Ponds should only ever be fed from a natural ground source or rainwater. If possible, the pond should have at least some shallow edges since these provide a wider range of habitats for wildlife. The temperature of the water in the shallow areas will be warmer and in dry periods, when the water level drops, there will be a wider area of bare ground exposed which invertebrates will use (the drawdown zone). Different species of plant will colonise the deeper and shallower areas, thus providing a wide range of vegetation for the larvae of species such as dragonflies to shelter in.

Four-spot chaser © S.Weeks

A buffer strip of tall grass around ditches, streams and ponds will provide food and shelter for reptiles, amphibians and invertebrates and should link in to nearby wildlife areas such as woodland edge and scrub. It can also act as a filter and prevent run-off from herbicide or fertiliser from entering the water. If possible, make the margin several metres wide.

If the pond is silting up, then ensure that only one third of the pond is cleared in any one year and only in the winter months. The cleared material should be left beside the pond to enable any animals to return to the water. Check for the presence of great crested newts before doing any management work as these are protected by law.

Boggy area at Whitstable and Seasalter Golf Club © KWT

Invasive species such as New Zealand pigmyweed, Himalayan balsam and Japanese knotweed can be a particular problem and need to be controlled.

Involving members

Enhancing a golf course for wildlife involves not just the course managers and their staff but also the management committee and the club members. Below are some suggestions for ways in which to bring everyone on board:

Bat evening at Nizels Golf Club © A. Cheeseman

- a programme of guided walks and evening talks with local wildlife enthusiasts. Spring dawn chorus walks are popular and avoid disruption to players.
- well designed interpretation boards situated at strategic points on the course, leaflets and a noticeboard with species records in the clubhouse
- grants are sometimes available for management work such as coppicing, including the Environmental Stewardship and England Woodland Grant Schemes. Kent Wildlife Trust can provide help with applying for these grants.

Kent Wildlife Trust workshop at Wildernesse Club © KWT

- a number of awards for environmental best practice are available. Why not enter your golf course and show everyone what a wonderful place for wildlife it is? Details are available from the R&A website.
- keep a record of what species have been seen, when and where. In this way, staff can get a sense of how well the local wildlife is responding to any changes in management and can adjust management regimes if need be. Records can be sent to the Kent and Medway Biological Records Centre.
- create a conservation task group, which could include keen members who enjoy practical outdoor work but could also include some other local volunteers. Tasks such as making bat or bird boxes, scything, raking up cuttings, coppicing by hand and creating log piles are all popular activities. However, the group could also do some wildlife monitoring such as breeding bird surveys or butterfly transects.
- there are sometimes opportunities around the clubhouse for wildlife gardening, including putting in ponds, native-species hedges, bird feeders and bird boxes. Fruit trees and pollen and nectar-rich wildflower borders can contribute to a wildlife-rich environment and still provide an elegant backdrop to the buildings.

Award winning wildlife garden © C.Blackburn

About Kent Wildlife Trust

Founded in 1958, Kent Wildlife Trust is the leading conservation charity in Kent and Medway. The Trust has five visitor centres and over 60 nature reserves and manages well over 3,000 hectares of land for wildlife. It is an independent charity and receives no government funding. It is a membership organisation with over 30,000 members and relies on membership, donations and grant funding to enable it to carry out its vital work to conserve Kent's natural heritage.

The Trust is a member of The Wildlife Trusts, a network of 47 independent Wildlife Trusts, the fastest growing environmental movement in the UK.

Our Land Management Advice team has provided advice and support to landowners and farmers in Kent for many years now and our clients include several golf courses. For further information about our work and how we can help you, please call 01622 662012 or email info@kentwildlife.org.uk.

With thanks to Les Edwins and Abigail Motley for their help with compiling this leaflet. Illustration by Victoria Wainwright www.victoriawainwright.com.

Further reading and references

Duff, K.L. & Symes, N. (2009) *Birds and golf courses; a guide to habitat management.* The R.S.P.B., Sandy and The R&A, St Andrews.

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Managing your Golf Course for Wildlife

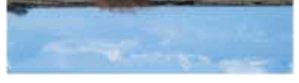
Kings Hill Golf Course © N. Coombs

Large print version available by calling 01622 662012

Your living landscape. Your living seas.

Golf courses present a wide array of habitats, ranging from heathland and woodland to ponds, bare ground and grassland. They can act as stepping stones for wildlife in intensively managed farmland or urban landscapes. The following recommendations are designed to complement the work already being done by many golf course managers and to create a diversity of wildlife-friendly micro-habitats, such as woodland edge, grass margins and habitat piles.

Golf courses can support different habitats ranging from highly managed greens and tees, through less intensively managed fairways and roughs, to non-playing areas of natural habitat. Older courses which were developed from natural areas may support some habitats that have been present for 100 years or more. Even modern courses that have been built on reclaimed or ex-agricultural land contain areas that can be developed to enhance local biodiversity. Such areas can act as "stepping stones" and provide corridors through which wildlife can move to adjoining natural habitats – acting as part of a wider local landscape and ecosystem.


Littlestone Golf Club, a first port of call for migrant birds every autumn © S.Humphreys

Many species have quite specific requirements as to food, shelter from predators and nesting habitat. They also each have particular ways of dispersing through the landscape. Therefore, one of the key factors in having a biodiverse-rich site is to create or maintain a wide variety of habitats. Ideally, these should be linked by ditches, hedgerows, woodland shaws, lines of trees and margins of taller grass (what are sometimes referred to as linear corridors). For example, some bat species use hedgerows as flight lines and avoid flying out in open landscape where they are more vulnerable to predation.

Grassland strip providing a wildlife corridor, Whitstable and Seasalter Golf Club © KWT

Try to link the habitats of your golf course to the wider landscape. Find out what native habitats and species are established in the surrounding area, and formulate your management plan to encourage these. Depending on the soil and geology and drainage, you may get some species and not others.

Options to recreate a wildflower meadow will depend on the soil type since species-rich grasslands are found on poor soils. If relying on buying in wildflower seed, check that it is of local provenance. A late cut in August should be sufficient to let most wildflowers set seed.

Avoid putting on any fertilisers. If weed control is required, use spot-treatment or weed-wiping. Cutting or grazing for a few weeks during the first spring flush of plant growth, with a second cut in July and, if needed, a third cut in September, can help to control species such as creeping thistle.

Bare ground

Bare ground tends to be warmer than surrounding grassland and is attractive to burrowing insects, which in turn provide a food source for other species. Sand pits, bare ground at the foot of hedgebanks, unsurfaced tracks, paths and parking areas for buggies can all provide suitable habitat.

Grasslands

Grassland types will vary hugely throughout the county, depending on management history, current nutrient inputs, soil types, drainage, aspect and many other factors. Many of our species-rich grasslands have disappeared since the Second World War, mainly as a result of agricultural intensification. As a result, not only have many wildflower species suffered dramatic declines, but so have the species associated with those habitats such as bumblebees.

Buff-tailed bumblebee © R. Moyse

Where possible, the aim should be to provide a variety of grassland types, ranging from short to tall vegetation, since this will suit a diverse range of species. Birds such as skylarks may prefer shorter grass where they can detect predators; small mammals might opt for tussocky grass (which provides an excellent hunting ground for barn owls) and some butterfly species will lay their eggs on tall grasses. Cutting should be carried out often enough to prevent succession to scrub, but should allow time for wildflowers to flower and set seed, and not disrupt ground nesting birds. Always remove cuttings to prevent thatch build-up, as this will smother other less competitive grasses and wildflowers and will increase nutrient levels. Compost heaps can be created and provide habitat for reptiles such as grass snakes and slow worms.

Management for tussocky grassland can include the roughs, with cutting carried out on a rotational basis so that some portion of the grassland is cut each year, other parts only every two or three years.

Woodlands

Most woodlands will require some degree of management as many woodland plants rely on sunlight reaching the ground and the loss of those plants from the woodland floor and understorey will, in turn, result in a loss of the species which depend on them for food and shelter. Thus some management will be required to let the light back in and this may be carried out through a mixture of thinning and coppicing. Other less drastic means of letting some light back include introducing or restoring paths and rides. Woodland provides a sheltered habitat for a wide variety of plants and animals, including many rarer species, such as the early purple orchid, the hazel dormouse and the serotine bat.

In woodlands which are big enough and where there is a history of coppicing, re-introduce rotational coppicing in areas of no less than 0.25 acres. In smaller woodlands, creating scallops along the edge or along woodland paths will have a similar benefit without having quite such a visual impact.

Bluebells in a newly coppiced area © A. Waite

Widening rides are creating glades and/or scallops will allow more light to penetrate and encourage development of ground flora and invertebrate populations. Butterflies are particularly attracted to sunny, sheltered areas of woodland. The glade can either be left to grow out and a new one created elsewhere in the woodland or maintained by cutting back the scrub with a strimmer/flail every year. When widening a glade, try to fell on the southern edge.

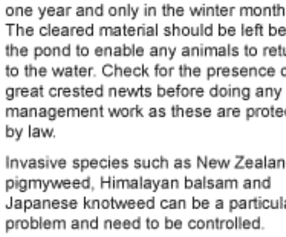
Woodland edge is known to be particularly species-diverse and creating a more gradual edge with a wide transition from shorter, rough grassland to taller grassland to scrub, shrubs and finally woodland will be very beneficial. Creating scallops on rotation will ensure there is always a mosaic of vegetation available.

Standing and fallen deadwood (or woodpiles) provides a valuable resource for many species, including lichens, fungi and invertebrates, which in turn provide a source of food for birds and small mammals. It also provides good hibernating and sheltering sites for invertebrates, reptiles and amphibians so, unless it presents a safety hazard, be sure to leave some in the woodland and on the woodland edge, near scrub and tall vegetation, and in shady and sunny areas.

Non-native species such as sycamore and rhododendron will take over so it is important to control them. Failure to do so will mean that species such as rhododendron and cherry laurel (both evergreen) will eventually shade out any understorey and ground flora.

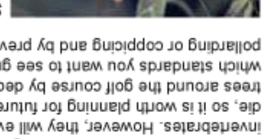
Veteran trees

Veteran trees may be found in habitats including hedgerows, woodland and pasture. They constitute a micro-habitat in their own right by providing features such as song posts and nesting sites for birds including owls, roosting sites for bats, and habitat for lichens, fungi and invertebrates. However, they will eventually die, so it is worth planning for future feature trees around the golf course by deciding which standards you want to see grow old, by ensuring their management by pollarding or coppicing and by preventing other trees from shading them out.


Veteran tree, Knole Park © C. Blackburn

Scrub

Scrub can include anything from bramble to hawthorn on nettles and is a habitat in its own right which provides vital food, shelter and nesting sites for species such as nightingales, dormice and groups such as reptiles and amphibians. It also provides a good source of berries for overwintering and migrating birds. Some coppicing on rotation every 2 to 20 years will vary the scrub structure and ensure that some habitat is always left undisturbed; it will also prevent it from turning into woodland or encroaching onto other areas. It is important to do management work outside of the breeding season and to always check for species such as reptiles before starting the work.


Mistle thrush © A. Lewis

Hedgerows

Hedgerows can provide a source of food such as berries and nectar; they also provide shelter from predators, physical corridors between different habitats such as woodland and nesting places for birds and small mammals. Where road safety is not a consideration, hedges should be cut on a rotation of at least two or three years, since for many hedgerow species the plants only flower on one year old stems. Cutting should always be done outside of the bird nesting season. When planting a new hedge or gapping up an old one, native species should be used since these tend to support a wider variety of wildlife. Clumps of tall, tussocky vegetation left around the base of the hedge can provide good nesting habitat for birds and small mammals and feeding, egg-laying and overwintering habitat for invertebrates.