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FARMING TO BENEFIT WILDLIFE

Pond management



Four-spotted chaser by Alan Nelson



Andy Hay (rspb-images.com)

All forms of wet feature on farmland are beneficial for wildlife provided that the water can be protected from inputs of fertilisers and pesticides.

Water quality is the only critical factor to ensure that ponds provide wildlife benefits. Different types of ponds will support different wildlife, so it is good to have a range of pond types around the farm. Seasonal ponds can support very rare species, especially when they occur in semi-natural landscapes, such as native woodlands, semi-natural grassland or heaths. Ponds that dry out only in occasional drought years can be very good for amphibians, because the occasional drought

eliminates fish, which are major predators. Ponds that have silted up often have the greatest diversity of wetland plants and shaded ponds in woodlands have their own unique wildlife interest. Such ponds may need little or no management. If you wish to maintain some permanent, open farm ponds, management is required, but check the wildlife interest of ponds that have been silted up or shaded for many years before embarking on 'restoration'.

BENEFITS FOR WILDLIFE

Benefits

- Farm ponds provide benefits for a wide range of aquatic plants and invertebrates. All wet areas on farms can boost the availability of insect food for birds and other wildlife.
- The shallow water at the edge of ponds (less than 2 cm deep) and the muddy edges exposed as the water level drops during summer are particularly important for invertebrates, so ponds created with gently sloping sides are ideal.
- The area surrounding the pond can be used to create a habitat to support amphibians and emerging insects to increase the wildlife value further.

GUIDELINES OVERLEAF

- Do not create ponds on sites with existing wildlife value, such as marshland or flower-rich grassland.
- Select a site with a good-quality water supply (unpolluted groundwater or surface water from a clean catchment, eg with a high proportion of woodland cover), well buffered from crop management.
- Dig test holes to check that the soil structure at the depth you want to reach is impermeable.
- Create gently shelving margins and a maximum depth of 2 m or less – a graduated ‘draw-down zone’ allows a muddy edge to be exposed progressively through the spring and summer, which will benefit a wide range of wildlife.
- It should not be necessary to introduce any animals or plants to new ponds. They will quickly be colonised by plants from the existing seed bank. Introduce locally native plants if desired, but avoid introducing any fish or non-native plants or animals.
- A useful wet feature can be created by bunding a ditch with an outlet pipe to control water levels, and widening the profile of the ditch immediately upstream of the bund. Such ponds can help to clean up water from polluted watercourses. You will need a licence from the relevant agency* to create a

pond fed by a watercourse or any pond holding in excess of 25,000 m³.

- If the pond has a watercourse running through it, a silt trap may be placed on the inflow side.
- On larger ponds (greater than 0.25 ha) you could include islands or nesting rafts for birds and other wildlife.
- Protect the pond from all forms of fertilisers and pesticides, ideally with a 10–20 m buffer zone – this can be used to create a complementary habitat, such as native or flower-rich grassland, or scrub. Some pond insects require pollen and nectar sources to complete their life-cycle, so a flower-rich sward can be particularly beneficial. You could create shallow, scraped areas beside the pond to provide ephemeral marshy areas, which attract another range of invertebrates. A small wood or stone pile in the buffer zone can act as a hibernaculum for amphibians and a basking site for insects and reptiles.

Restoration and management

- If you wish to maintain open water, you may need to manage emergent plants, using extensive grazing or mechanical cutting (eg of one third of the vegetation per year). It is important to protect the banks from excessive poaching or dunging, although some bare ground created by limited stock access provides benefits for some species.

- Dredging may be necessary to remove nutrient-rich sediments from stream-fed ponds. Reeds and other tall emergent plants may take up nutrients, but they can fill up the pond more quickly.
- Dredged material removed from the pond should be spread away from the bank so that nutrients do not leach back into the water. Ponds should not be cleaned out between March and September, when newts may be breeding.
- Unless the pond has a specific objective, maintain a diversity of habitats. Do not top up ponds that dry out in the summer.
- Before restoring a pond, seek advice to protect the wildlife value, with particular attention to amphibians and macro-invertebrates, such as dragonflies.

Irrigation reservoirs

- The wildlife interest of irrigation reservoirs is compromised by the steep sides and fluctuating water levels – they can still be managed in ways to create the right vegetation and conditions for aquatic invertebrates, a useful food source for larger animals.

KEY POINTS

- Any wet feature on a farm can benefit a range of wildlife
- Do not create ponds on sites with existing wildlife value
- Shallow water is especially beneficial
- Do not remove more than one third of the marginal vegetation in any one year
- Avoid using fertilisers and pesticides near wet features

* Environment Agency (England and Wales), Scottish Environment Protection Agency (SEPA) or Department of Environment (Northern Ireland) (DoE (NI))

For answers to all of your farm wildlife enquiries, visit www.farmwildlife.info



You can get further information on this and other ways of managing your farm for wildlife from:



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