



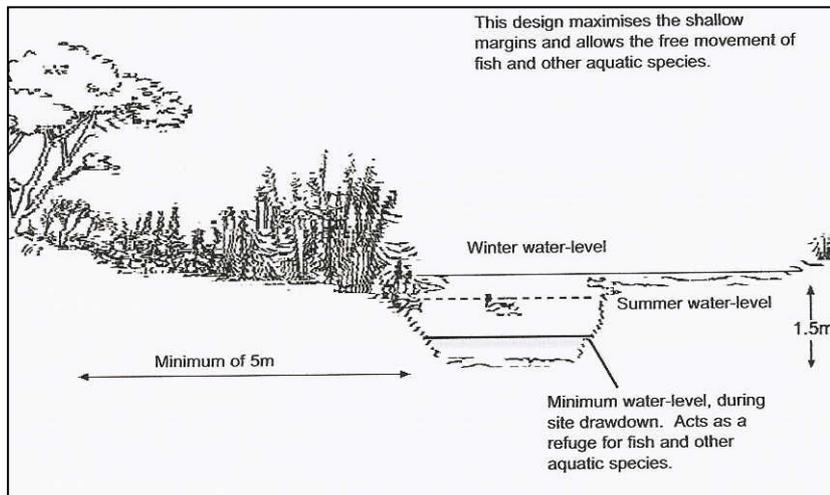
Ditch Management

Open ditches, burns and drainage channels are important links for wildlife, as well as features on the course. They provide corridors for movement between habitats and can help increase diversity.

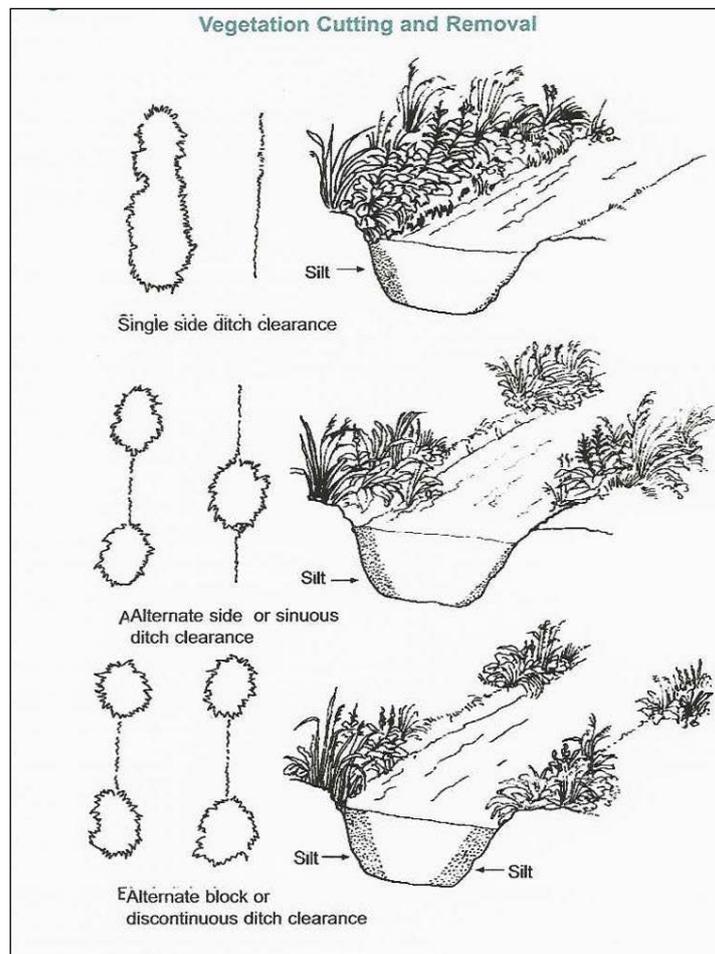
There are a number of ways in which management can enhance these features:

- Where possible allow rough grasses to establish along the ditch edge. This can be difficult when the ditch is in-play and especially when engineered. All water bodies should have a 'no spray zone' and grassland 'buffer' to prevent water pollution incidents. For current regulations see: <http://www.sepa.org.uk/regulations/water/diffuse-pollution/>
- In out of play areas they should be allowed to develop a buffer zone of rough vegetation to intercept and filter any runoff from chemical applications. This increases the naturalness of the feature and protects it from disturbance, nitrate leeching, spray drift etc. Many species such as frogs, toads and newts spend much of the year on land and rough vegetation around the water will provide foraging and hibernating areas.
- Create rough grassland buffer strips and no spray zones of at least 3 metres around ponds and ditches. This increases the naturalness of the feature and protects it from disturbance, nitrate leeching, spray drift etc. Many species such as frogs, toads and newts spend much of the year on land and rough vegetation around the water will provide foraging and hibernating areas.
- Where they have to be close mown to the edge, avoid grass clippings and corings being spread into them, as this may cause pollution through enrichment of the water, potentially leading to algal blooms and de-oxygenation.
- Periodic maintenance is necessary to ensure that ditches function correctly and aid drainage. Care should be taken with the timing of such work. The spring and early summer (April to June) should be avoided for all wetland work and ditch maintenance, to avoid disturbance of breeding amphibians and invertebrates, and accidental destruction of spawn, larvae etc. Where possible ditch maintenance should be carried out in sections over two to three years

in the late autumn, leaving the undisturbed sections as retreats for wildlife whilst work is being carried out. Where this is not possible, clearing only one bank at a time will also provide refuge for invertebrates and amphibians. Any cleared vegetation should be left on the bank for two or three days to allow any invertebrates to return to the water.



Idealised ditch profile



Ditch vegetation removal and cutting

- Preferred Water Vole habitat is steep banks, with luxuriant vegetation. Whilst it is not practical to provide longer vegetation where the ditches or burns come directly into play, out of play sections will provide valuable habitat if they are allowed to develop naturally.
- Under the Nature Conservation (Scotland) Act 2004 Local Authorities have a duty to take account of biodiversity within their operations. Developing well vegetated burns on golf courses, for the benefit of Water Voles, would help your local authority to achieve this duty. It is also being increasingly discussed whether actions such as deliberately mowing banks in known Water Vole locations may in future be viewed as in contravention of the same act.