PLANTS FOR PONDS AND PENS
INFORMATION SHEET

Duck enclosures need not be muddy, bare, unattractive areas of your garden. With careful planning and a little foresight, pens can be made attractive to the eye and thus enhance the beauty of the residents.

STOCKING
It is easier to create and landscape an enclosure for wildfowl and bantam ducks than it is for heavy domestic ducks and geese. The main priority when keeping heavy domestic ducks and geese must be to maintain sufficient grass, it is virtually impossible to landscape successfully with plants alone.

Sufficient grass in any enclosure is essential if the pen is to remain attractive throughout the year. As a general rule, if the grass does not require cutting in the summer, then you are perhaps over stocked with birds. One cannot over emphasise the problems that overcrowding can cause. Experience and time will teach you how to maintain the balance between ducks and plants.

Don’t forget many species of swan, geese and ducks graze prolifically, so good grass is essential in any landscaping scheme. A suitable resilient mixture will depend on your individual situation but recommended varieties to include are perennial rye grass, cocksfoot, fescues, timothy and white clover.

POND ESSENTIALS
Before embarking on a planting regime it is important to consider the pond. No matter what the pond style, if they are to survive ducks constant puddling, all ponds require suitable reinforcement around the edges. This will serve to prevent banks being eroded away, stop mud around the area becoming a problem and protect roots of surrounding plants.

In a moderate sized pen with either a small or natural pond, pea-gravel spread around the perimeter of the water forms an attractive feature. For larger ponds materials can vary from larger stones to paving or timber.

A variety of depths of water with reinforced banks will help establish good bank-side cover and support a small population of duck without detriment to the pond. However, where there is no running water, or where there is heavier stocking a filtration system may well be
required. All ponds will require occasional de-silting and removal of unwanted plant growth. Your planting scheme should allow for this to be done by hand or machinery with minimal damage to existing vegetation. Work of this kind should be carried out in the autumn/winter to avoid disturbance of breeding birds and to allow vegetation to recover in spring.

For planting, a shelf with a gradient of 1:2, or even 1:3 will create ideal conditions for marginal vegetation and prevent further encroachment into the pond once the depth gets to 1.5m. Waterfowl will need a shallow sloping edge for safe entrance and exit to the pond as well an area on the bank, clear of planting, for standing, sunbathing and preening.

**PLANTING**
Assuming that the pond, the area of the enclosure and the waterfowl are reasonably balanced, it is perfectly feasible to plant successfully for the enjoyment of all. Ideally the enclosure should be planted and established before birds are introduced. Should you have to plant after the arrival of your birds, then your plants and flowers must be protected, until they are fully established. 25mm wire netting, 50cm high, placed around each plant will provide this protection and prevent the plants being destroyed by the inmates. The construction and layout of the pen should be attractive but practical. One should plant with the intention of providing adequate cover for nesting birds, plus shade in the summer and protection in the winter. Remember that too much planting will obscure your birds!

It is vital to take in the nature of the surrounding environment and plant accordingly. Choices for a garden or park pond, for example, are not necessarily suited to the creation of a natural or wildlife pond where you should stick to the use of native or naturalised plants.

Before embarking on a planting programme, assess the soil and water in order that suitable plants can be chosen, for example: is the soil acidic or alkaline, sandy or nutrient rich; is the water shallow or deep, still or moving? Care in planning will help ensure good establishment and survival. On the whole native species of local provenance will grow best and provide the right habitat for waterfowl and other wildlife. Be very careful transplanting vegetation from another pond to ensure that you do not transfer non-native species that are disastrous for pond life such as Parrot's feather, Floating pennywort, Water primrose, Water fern and New Zealand pygmy-weed (also called Australian swamp stonecrop).

**PLANT VARIETIES**
There are very few plants that your geese and ducks won’t eat, in particular they enjoy new growth but some plants stand up to waterfowl better than others once well established. Plants are as important as the water itself; providing food, harbouring insects and aquatic life, giving valuable shelter, offering cover from predators and allowing sites for nesting and protection for ducklings in their first few weeks.

In any planting scheme only a small number of species need be introduced as in most cases these will spread rapidly once established. The aim should be to create a plant profile using species from each of four categories below.
- Trees and shrubs
- Marginal plants
- Submerged plants
- Free-floating plants

**Trees and shrubs** should be planted back from the water’s edge to provide shelter from the prevailing wind and useful breaks from sun, frost or snow. Small trees and bushes near the waters edge may also provide a frost free spot on the water and a supply of invertebrates to the pond but excessive shading and leaf litter will affect the water quality so should be avoided. Shrubs can provide good low level bushy cover for nesting and breeding. However, too much shrubbery or undergrowth along the banks will harbour vermin.

For natural planting popular choices of tree include Alder, Willow, Oak and Birch. Oak must be planted well back from the waters edge. Willow is particularly useful as it is attractive, quick and easy to grow. There are Willow varieties suitable for smaller sites, such as Contorted Willow, as well as for coppicing. Smaller trees such as Cherry, Rowan, Elderberry, Flowering Crabs and thorns are also good choices that are both ornamental and provide valuable food for birds. Beech hedging and Dogwood provide good windbreaks whilst Bramble and Gorse are fairly inedible and give good nesting cover too.

For more formal parks and gardens, evergreen trees and shrubs supply excellent shade in the summer and protection in the winter. Cypress and Juniper types offer a wide variety of sizes, forms and colours. Norway spruce, Larch and Cedar are popular choices but for those with smaller gardens dwarf varieties are ideal being both slow growing and non-invasive. Flowering evergreen and semi-evergreen shrubs such as Berberis, Broom, Choisya, Pieris and Pyracantha add colour and interest to any planting scheme, whilst Box, Cotoneaster, Eleagnus and Lonicera nitida are particularly useful for screening items such as nest boxes. Bamboo is an excellent focal point or screen that adds an exotic feel and gives all year round cover and nesting material.

Other popular shrubs for colour, interest, nesting cover or attracting insects include: Buddleia and Spiraea; smaller Potentilla, Rock Rose and Heathers; as well as ground cover plants such as Periwinkle.

**Marginal plants** tend to tolerate fluctuating water levels, growing from dry ground at the waters edge down to water depths of 1m or more. They help stop bank erosion, provide cover for birds, attract invertebrates and aid the survival of ducklings. Sedges, reeds and flags are all good marginal plants that provide an ideal habitat for both ducks and their insect food. These do need to be well established before introducing ducks unless you cover the roots with fine wire mesh or erect a temporary protective fence.

Sedge grass, such as *Carex pendula*, or *Cyperus longus* planted in clumps of three, provides an excellent habitat for ducks requiring good ground and nesting cover. When
established it can be used to conceal nest boxes. To accompany this, native Willow herb or Purple loosestrife, look most impressive when planted in swathes. For smaller garden spaces choose Carex Aurea or Carex Evergold.

Reeds grow in stands and are useful for bank stabilisation but many, such as Common Reed and Reedmace, tend to be invasive. If you wish to include them in your planting they can be contained by a creating deep water channel around them of 1.5m-2m in depth. Obviously this is only suitable for larger ponds. For less invasive reeds choose Common bulrush or smaller reeds such as Common Spike-Rush, Corkscrew Rush or Hard Rush.

Most of the taller irises look tidy, even when not in flower, and are a good choice to plant right at the edge of a pool to break the outline; native and non-native species are available. Some irises are poisonous and although many say that ducks and geese will naturally avoid eating these, if in doubt, leave them out of your plant choice. Montbretia, a small genus of the iris family, is also a useful plant for nest making and planted in abundance, away from the waters edge, can be spectacular in flower. Astilbe is a plant that can be used to the same effect closer to the water, it is low maintenance and perennial, but not native.

Grass is a popular choice, giving good cover and making ideal nesting material. However, Pampas grass can also harbour rats so careful management is required. Most ornamental grasses and ferns will make a superb display if given time to establish.

Submerged plants and free floating plants will only survive if your waterfowl stocking density is very low and it may be necessary to keep them well protected.
Submerged plants can grow to the depth of 2m, encouraging invertebrates and providing an important source of food for diving ducks. By serving as oxygenators they can also help improve water quality and the health of the pond.

Mare’s Tail is an excellent choice of oxygenator and can be planted as a marginal or submerged plant, but do not confuse with horsetail which is a very pernicious weed! Water Starworts are also a great oxygenators, good for wildlife ponds providing a haven to all manner of aquatic insects, but can be difficult to get going. For variation other options include Water Crowfoot, which bears attractive white buttercup flowers and foliage above and below water, and Stoneworts which are particularly good for shallow ponds, carpeting the bottom and leaving water clear at the top.

Free floating plants, such as duck weed, are an important food but they can cause problems by covering the pond completely. Duckweed floats on or just below the surface of the water, providing cover for the fry of many species and an important food source which is very high in protein. They can also help with nitrate removal, so act as water purifiers, and in summer a decent coverage will help reduce water evaporation. A second popular free floating plant to add interest is Frogbit, which floats on the surface looking like a tiny water lily. Frogbit hibernates at the bottom of the pond in the winter but in the summer re-surfaces to provide shelter for tadpoles, small fish and larvae.

POISONOUS PLANTS
Waterfowl are naturally inquisitive and may uproot and nibble any plants in and around the pond. You should remember that there are plants that can be harmful to your birds and although they tend to avoid eating poisonous plants due to their bitter taste, where there is any doubt risk should be avoided. If in any doubt about any plant being harmful to your birds it is always best to ask advice at your local garden centre.

Listed below are some common examples of poisonous plants including native species and common garden plants. Also remember that blue-green algae is quickly fatal; water containers should always be kept clean and access to stagnant water should be prevented especially in hot weather.
In conclusion a well planned duck enclosure brought alive by both careful planting and waterfowl roaming freely, is a joy to the eye.

*Compiled with help from Clare Lovegrove and Tim Daniels*
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This leaflet is only a brief introduction and the successful husbandry of all livestock depends on being well informed about them. The BWA Bookshop sells a number of specialist publications which cover all aspects of keeping both Wildfowl and Domestic Waterfowl. All new keepers are strongly advised to obtain a book appropriate to their interest.