



Nature / Water: Pond Creation and Sustainable Drainage

Auchterarder Golf Club

THE CHALLENGE

Auchterarder is a heathland/woodland course set in a largely upland/rural landscape. The section of the course that is more wooded in character is also wetter. Over a number of years a large part of this area suffered from worsening flooding and water logging during periods of heavy or prolonged rainfall.

THE SOLUTION

It was recognised that a review and upgrade of the drainage system of that part of the course was required. Within the worst section of waterlogging there was a large 'out of play' area that was unused and unmanaged. It was felt that a wetland could be incorporated as a golfing feature and to assist in the creation of a sustainable drainage system incorporating conservation value, community involvement and primary water treatment.

The area for wetland development was roughly triangular in shape, bounded by two fairways and one green. It came into play from all three holes. The project aim was to create a variety of aquatic habitats and an attractive golfing feature that contributed to the sustainable drainage of the course. A consultant was employed to design a project that met those aims.

Following consultation of the draft plans with Auchterarder Golf Club Committee and confirmation of funding, a final design was agreed. The project then went to tender and a private contractor appointed.

The final designs proposed the creation of a large pool with varying depths (40m by 24m, with depths varying from 0.2m to 0.75m). Sloping edges were incorporated into the design, and an island was created to provide additional habitat. The margins were planted with a variety of wetland plants and floating species such as water lilies were planted into the open water.

Inflow and outflow ditches were also created to link in with existing drainage systems. The surrounding area was seeded with an appropriate wild flower and grassland mix. Site construction commenced in mid-September and was completed by late October, to be finally available to the public in the following June.

The project took a partnership approach. The initial consultation with Scottish Golf Environment Group led to involvement from SEPA's Habitat Enhancement Initiative, Scottish Natural Heritage, Fresh Futures and Perth and Kinross Council, Environment Services. The project was co-funded by these partners and Auchterarder Golf Club.

THE OUTCOMES

- Creation of superb pond and wetland habitat – including a large pond with island, new ditches and concrete spillway
- Creation of associated grassland habitat
- Creation of attractive and challenging golfing features.
- Together with a well designed conventional drainage system this pond creation project provides a successful sustainable drainage solution that helps maintain the course in optimum playing condition throughout the year.
- A system that provides primary water treatment and retention
- Wildlife has begun to colonise – waterfowl and Mute swans have used the pond, and a variety of freshwater invertebrates and amphibian larvae have already been observed in the first spring. The project strongly supports P&K Council Environment Policy & Action Plan.
- Regular, on-going monitoring of species present
- Provision of an educational and recreational resource
- Increased promotional opportunities for Auchterarder Golf Club - positive press and news articles.

The photographs below illustrate the changes to the water logged area:



August 2002. Pre-construction



May 2004. Post-construction



August 2002. Pre-construction



May 2004. Post-construction

As well as the contracted works volunteer labour was also supplied by Auchterarder Golf Club, in particular for project administration, erection of signage and soft landscaping. The club were so pleased with the success of this project, another wetland creation project was planned and successfully implemented, enhancing the network of wetlands on the course and solving flooding on the 9th Green caused by surface water runoff.