

ADVISORY VISIT TO GARTMORE LOCH, ABERFOYLE, 2 OCT, 2005

**Undertaken on Behalf of the Wild Trout Trust By Dr Andy Walker,
(Ellwyn, Moulin, Pitlochry PH16 5ER Tel: 01796 472743; E-mail:
libisandy@aol.com), Windrush AEC Ltd**



Frontispiece: Gartmore Loch

1.0. BACKGROUND

An advisory visit was made to Gartmore Loch, by Aberfoyle, in the Scottish Trossachs at the request of Dr Isobel Madden due to local concern about damage to the loch and its environment that could result from proposed developments on a neighbouring estate in the catchment above the loch. This report considers the broad implications of the proposed development on the loch. However, it does not examine such impacts in detail. Further, more detailed studies would be required in order to fully quantify the likely impact of the development on Gartmore Loch and its catchment.

2.0. DESCRIPTION

Gartmore Loch (OS Ref: NS531981) is an attractive small loch of about 6 acres adjoining a private house and on land owned by Dr Madden (Frontispiece). It contains a population of brown trout (*Salmo trutta* L.), some weighing in excess of two pounds, wholly supported by natural spawning in two small inflowing streams. The outlet flows over a dam through two functioning sluices. The loch was created from a smaller pool in Victorian times by the construction of a simple boulder, concrete and earth dam and the loch margins and inflowing streams are faced in many areas by old stonework. There are two small islands and an old boathouse. Views of the loch and its environs of woodlands and open fields are enjoyed from nearby Walks and access driveway by local people from the village of Gartmore and visitors to Gartmore House Estate. The loch is fly-fished lightly from a single boat by guests and local anglers and is visited by ospreys, herons, the occasional otter and a wide variety of wildlife.



Plate I: View North over Gartmore Loch



Plate II: One of many attractive views over Gartmore Loch

Gartmore Loch is a well-established water body, with high ecological significance in terms of biodiversity of riparian, marginal and aquatic plant communities and associated fauna. There is no evidence of significant sedimentation and shallowing. Wild brown trout of the size found there are increasingly rare in Scotland and highly appreciated by anglers. Most that are caught in Gartmore Loch are returned alive.

The two small inflowing burns provide limited spawning habitat for the trout population and recruitment of juvenile trout to the loch is likely to be low. Hence there is less competition within the loch for food and space and the trout can grow to a good size. The burn on the north bank flows through fields with light tree cover then steeper through well-established mixed woodland with many mature trees into the loch (Plate III). The spawning potential appears to be greater above the fence skirting the upper part of the wood (Plate IV). The plans for the equestrian development indicate that this burn would be diverted in order to create a new lochan. An exercise track for race horses would also cross the burn. In addition, some of the woodland would be cut down to create better access for the track. The other burn flowing into the loch through open fields on its western flank is very shallow (Plate V), lacking cover for adult trout making their way upstream to spawn. This burn also would be crossed by the exercise track.



Plate III: Main stream in the wood above the road with larger pebbles and large stones, with limited gravel for spawning



Plate IV: Better spawning gravel above the wood



Plate V: Smaller burn flowing through open pasture

The inflow burns were running fairly full after a wet spell and the loch was at top level. Although both flows can be regarded as permanent, they will contract substantially in extended drought conditions.

The loch is a reservoir, but was described in 1986 by consulting engineers as not a “large raised reservoir” and therefore not subject to the terms and conditions of the Reservoirs Act, 1975, requiring regular inspection. However, some erosion under parts of the top of the concrete facing requires refilling and consolidation before further damage occurs that may weaken the banks. Some remedial action has been carried out in the past. Fortunately, the water was shedding directly into the outlet stream and not digging a new course.

3.0 COMMENTS

- There are reasonable grounds for concern regarding the possible impact of the proposed equestrian centre on the established wild trout population in Gartmore Loch, its fishery and general amenity value, both during the construction phase and thereafter.
- Maintenance of the security and purity of the water supply from the two inflow burns is crucial. The wild trout population depends on the already limited spawning and nursery habitat availability in the burns and this could potentially be lost, or seriously damaged, as a consequence of constructional work, woodland clearance, stream course diversion, sedimentation and faecal or urine pollution from the use of the exercise track by race horses, or from any inadequacy of sewage treatment and disposal leading to discharges to the burns.
- In addition, the natural ecology of the loch could be substantially affected by sediment and nutrient discharges beyond present conditions, creating algal blooming and rapid shallowing.
- It is recommended that further, more detailed conservation advice be obtained by the owners of the loch with respect to possible mechanisms for the prevention and mitigation of potential damage to the loch and its catchment by the proposed development. This advice is beyond the scope of this report, which seeks only to highlight the broad scope of such impacts.
- This report is produced for guidance only and should not be used as a substitute for full professional advice. Accordingly, no liability or responsibility for any loss or damage can be accepted by Windrush AEC Ltd as a result of any person, company or other organisation acting, or refraining from acting, upon comments made in this report.