COUNTY: SURREY SITE NAME: VANN LAKE AND OCKLEY WOODS

DISTRICT: MOLE VALLEY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: MOLE VALLEY DISTRICT COUNCIL

National Grid Reference: TQ 156392 Area: 56.8 (ha.) 140.4 (ac.)

Ordnance Survey Sheet 1:50,000: 187 1:10,000: TQ 13 NE & TQ 13 NW

Date Notified (Under 1949 Act): 1954 Date of Last Revision:1975

Date Notified (Under 1981 Act): 1986 Date of Last Revision: –

Other Information:
Part of the site is a nature reserve managed by the Surrey Trust for Nature Conservation. This site was formerly known as Vann Lake, and the site boundary has been modified by extensions and deletions.

Reasons for Notification:

This site contains a wooded gill which has been dammed to form a hammer pond. The underlying geology is mainly of Weald Clay, although contrasting outcrops of Paludina Limestone increase habitat diversity. The woodlands include blocks of ancient woodland, and are botanically rich, particularly with regard to bryophytes (mosses and liverworts) and fungi. The site also supports a number of uncommon insects, an important community of breeding birds, and a population of dormice *Muscardinus avellanarius*.

The woodland is dominated by pedunculate oak *Quercus robur* with ash *Fraxinus excelsior* locally abundant around Vann Lake. Other tree species include beech *Fagus sylvatica*, hornbeam *Carpinus betulus* and the locally rare wild-service tree *Sorbus torminalis*, whilst silver birch is common in disturbed areas. The shrub layer frequently includes hazel *Corylus avellana*, occurring with holly *Ilex aquifolium*, hawthorn *Crataegus monogyna*, midland hawthorn *C. laevigata*, and spindle *Euonymus europaeus*. Around the edge of Vann Lake and within the gill there are stands of alder *Alnus glutinosa*, with common sallow *Salix cinerea* and elder *Sambucus nigra*.

The diverse ground flora varies with the geology. Bramble *Rubus fruticosus*, honeysuckle *Lonicera perichymenum* and ground ivy *Glechoma hederacea* occur on the weald clay, and opposite-leaved golden saxifrage *Chrysosplenium oppositifolium* also occurs in the damp areas. Where there are calcareous influences pendulous sedge *Carex pendula*, dog's mercury *Mercurialis perennis* and wood melick *Melica uniflora* occur. Some of the less common plants that occur in the woods include spurge laurel *Daphne laureola*, Forster's wood rush *Luzula forsteri*, greater butterfly orchid

Platanthera chlorantha and violet helleborine *Epipactis purpurata*. The bryophyte flora includes the rare mosses *Dicranium tauricum*, *Fissidens exilis* and *Plagiothecium latebricola*, and the liverworts *Lejeunea cavifolia* and *Ptilidium pulcherrimum*. 611 species of fungi have been recorded on the nature reserve, including *Myarium crystallinum* a species new to science, and 6 species new to Britain.

Around the edge of Vann Lake water mint *Mentha aquatica*, nodding bur-marigold *Bidens cernua* and marsh marigold *Caltha palustris* occur, while the emergent flora includes stands of reedmace *Typha latifolia*, common reed *Phragmites communis* and yellow flag *Iris pseudacorus*. Both white and yellow water-lilies *Nymphaea alba* and *Nuphar lutea* occur.

The freshwater habitats support a range of dragonfly species including the uncommon downy emerald *Cordulia aenea* and shiny emerald *Somatochlora metallica*. The nationally rare cranefly *Molophilus lackschewitzianus* occurs along the gill, while the locally rare cranefly *Limonia didyma* breeds amongst mosses at the outflow waterfall below the lake. The site supports populations of a range of woodland lepidoptera, including the double kidney moth *Ipimorpha retusa*, and the rare purple emperor *Apatura iris* and silver-washed fritillary *Argynnis paphia* butterflies.

The woodland and freshwater habitats support a diverse range of breeding birds, including kingfisher, lesser-spotted woodpecker and hawfinch. The dormouse *Muscardinus avellanarius* a species which has declined in recent years due to changes in woodland management, still occurs within the woods on this site.