COUNTY:	OXFORDSHIRE		SITE NAME: GLYME VALLEY	
Status:	Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981			
Local Planning Authorities:		West Oxfordshire District Council, Oxfordshire County Council		
National Grid Reference:		SP340259		
Ordnance S	urvey Sheet 1:50,000:	164	1:10,000: SP32 NW, NE, SW & SE	
Date Notifie	d (Under 1981 Act):	4 Marcl	Ch 1988Date of Last Revision: 21 January 1994	

Area: 28.43 ha 70.27 ac

Description and Reasons for Notification

The site encompasses the headwaters of the River Glyme and the immediate slopes along a narrow, secluded valley which has largely escaped agricultural improvement. It is in two parts, and habitats present include limestone grassland, flushes of marshy grassland, neutral to acidic grassland, riverside fen, ponds, scrub and wet woodland. The site contains a large colony of the rare meadow clary *Salvia pratensis*, a species listed in the British Red Data Book of Vascular Plants.

The site lies on a succession of Jurassic strata where the river has cut down through the Sharp's Hill Beds, Chipping Norton Limestone and Clypeus Grit to the clays of the Upper and Middle Lias which are best represented in the lower easterly part of the site. Thin, well-drained soils of the Sherborne Series are typical of the valley side though some local clayey variation occurs in the valley bottom where the soils are only slowly permeable. The Glyme, which is a tributary of the River Evenlode, has been modified in the past at Old Chalford where there is now a mill pond.

The unimproved limestone grassland is dominated by upright brome *Bromus erectus* and although some sections are known to have been ungrazed for a number of years, they still retain a diverse assemblage of herbs. Anthills are present and there are a number of plant species indicative of a long period without fertilisers, herbicides or ploughing. These include lady's mantle *Alchemilla vestita*, dwarf and woolly thistles *Cirsium acaule* and *C. eriophorum*, cowslip *Primula veris*, small scabious *Scabiosa columbaria*, betony *Stachys officinalis*, devil's-bit scabious *Succisa pratensis* and common-spotted orchid *Dactylorhiza fuchsii*.

At the western end of the site where most of the grassland is semi-improved, steep dry banks support a rich limestone flora including one of the three largest populations of meadow clary in Britain. Associated plants are common knapweed *Centaurea nigra*, lady's bedstraw *Galium verum*, common restharrow *Ononis repens*, salad burnet *Sanguisorba minor* and wild thyme *Thymus praecox*.

Grassland of a more neutral to acid character is found on the lower slope of the valley sides associated with the Lias clays. Dominant grasses are Yorkshire fog *Holcus lanatus*, cock's-foot *Dactylis glomerata*, rough meadow grass *Poa trivialis* and locally abundant sweet vernal-grass *Anthoxanthum odoratum*. Characteristic herbs include common knapweed, lady's bedstraw, bird's-foot trefoil *Lotus corniculatus*, tormentil *Potentilla erecta*, dropwort *Filipendula vulgaris*, lousewort *Pedicularis sylvatica*, fragrant orchid *Gymnadenia conopsea* and early-purple orchid *Orchis mascula*.

Acid marshy grassland dominated by hard rush *Juncus effusus* occurs in flushes where springs emerge from the base of the limestone at the southern end of the site. These permanently damp areas also support ragged robin *Lychnis flos-cuculi*, marsh marigold *Caltha palustris*, meadowsweet *Filipendula ulmaria*, marsh foxtail *Alopecurus geniculatus* and rarely, common spike-rush *Eleocharis palustris*.

Fen occurs in the low lying areas immediately adjacent to the river and on the margin of the mill pond on soils with impeded drainage. Species associated with this habitat include rushes *Juncus* spp., greater pond sedge *Carex riparia*, great willowherb *Epilobium hirsutum*, meadowsweet, ragged robin, marsh valerian *Valeriana dioica*, yellow iris *Iris pseudacorus*, while common club-rush *Schoenoplectus lacustris*, a species with a restricted distribution in Oxfordshire, is present in one area. A small pond at the source of the Glyme supports mare's-tail *Hippuris vulgaris*, a species which has declined as a result of drainage.

Wet woodland occurs alongside the river and supports ash, field maple *Acer campestre* and goat and crack willows *Salix caprea* and *S. fragilis*. Scattered hawthorn scrub is present on the limestone grassland together with occasional field maple and mature oaks.

Birds recorded from the site include corn bunting, linnet, goldfinch, tree pipit, barn owl and willow warbler. The valle

contains a number of badger setts. Downstream of the site the river is designated as a trout fishery which indicates the high water quality.