

**CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

POWYS

LLAN BWCH-LLYN LAKE

<u>Date of Notification:</u>	1954, 1984, 1990
<u>National Grid Reference:</u>	SO 119464
<u>O.S. Maps:</u>	1:50,000 Sheet number: 148 1:25,000 Sheet number: SO 14
<u>Site Area:</u>	26.5 ha

Description:

This site is of special interest as a naturally developed mesotrophic lake of an uncommon national type. The marginal vegetation is of particular conservation value, with an interesting zonation, and displaying one of the best developed examples of fen vegetation in Radnor. The site is also of ornithological and entomological interest.

The aquatic submerged and floating vegetation is characteristic of an uncommon, though well dispersed, national type. Curled pondweed *Potamogeton crispus* and the alga *Nitella* sp. are well represented, and small pondweed *Potamogeton berchtoldii* also occurs. Both white water-lily *Nymphaea alba* and yellow water-lily *Nuphar lutea* occur. Other species include alternate water-milfoil *Myriophyllum alterniflorum*, ivy-leaved duckweed *Lemna trisulca*, shoreweed *Littorella uniflora* and amphibious bistort *Polygonum amphibium*. The algal communities are rather more typical of eutrophic lakes, with a diatom peak in spring and autumn, a peak of green algae in early summer and a blue-green peak in summer. This varies from year to year, but the usual genera involved include *Asterionella*, *Tribonema*, *Chlorella*, *Volvox*, *Anabaena* and *Microcystis*.

The marginal vegetation comprises eleven main community types, including more or less pure stands of the water-lilies, amphibious bistort and shoreweed. The remaining seven types are represented in areas dominated by common reed *Phragmites australis*, bulrush *Typha latifolia*, bogbean *Menyanthes trifoliata*, alder and/or willow carr and three different types of mixed marsh communities characterised by differing constancies of lesser pond-sedge *Carex acutiformis*, bottle sedge *C. rostrata* and greater spearwort *Ranunculus lingua*. The latter species is known to occur at only one other site in Radnor. Although modified by an artificial water regime, the presence of all these communities is of particular ecological interest in demonstrating a zonation between the aquatic and marsh vegetation margins. The marginal vegetation, together with areas of damp grassland within the site, contribute to the high diversity of fen species that occurs. At least forty species have been recorded, including meadowsweet *Filipendula ulmaria*,

marsh cinquefoil *Potentilla palustris*, gipsywort *Lycopus europaeus* and water horsetail *Equisetum fluviatile*. Areas of drier rough grassland contribute additional species such as sneezewort *Achillea ptarmica* and devil's-bit scabious *Succisa pratensis*.

The poor-fen and lake margins are of entomological interest, with a number of sparsely distributed species of beetle having been recorded. The uncommon oil beetle, *Meloe proscarabaeus*, has been recorded at the edge of the woodland included in the site. The lake is of local importance as a wintering ground for wildfowl such as mallard, teal, tufted duck, pochard and goldeneye. Breeding species include great crested grebe. Both wildfowl and waders use the area on passage in spring and autumn. Fish present include trout and carp, and bream and pike have been introduced.

*This document is **NOT** a definitive legal version and has been formatted, updated and partially edited for use on the CCW Web site. This document should not be used in any legal proceedings, public enquiry or any other hearing or appeal. If you require a full legal copy of the document please contact CCW in writing.*