

**Powys Local Development Plan,
Deposit June 2015**

Habitat Regulations Assessment

Appendix 4 – Qualifying Species Migration.

<u>Species</u>	<u>Suggested buffer</u>	<u>Source material supporting buffer distance</u>	<u>Particular issues for species</u>	<u>Associated Natura 2000 sites</u>
Great crested newt	1km	English Nature (2001) Great crested newt mitigation guidelines. Bedfordshire & Luton Biodiversity Action Plan.	<ul style="list-style-type: none"> • Pond losses in agricultural areas are probably of key significance in the decline of GCN. • Poor or absent pond management reducing the suitability of ponds for newts. • Loss of ephemeral ponds. • Chemical pollution and nutrient enrichment of breeding sites. • Unsympathetic terrestrial habitat management destroys hibernation sites and removes the cover required for adult and juvenile newts in their terrestrial phase. • Degradation, loss and fragmentation of terrestrial habitat. Populations require suitable terrestrial habitat adjacent to their breeding ponds and long-term survival may depend on movement between neighbouring populations (or breeding ponds). Closely-spaced ponds, or pond clusters (ponds within 500 m of each other), supporting metapopulations are important to long-term survival. Viable metapopulations require a 	Granllyn SAC; Johnstown Newt Sites SAC;

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			<p>minimum of five ponds.</p> <ul style="list-style-type: none"> Poor quality mitigation schemes including severance or isolation of GCN populations and suitable habitat, inappropriate aquatic to terrestrial habitat ratios, lack of appropriate planning and time needed to establish replacement/enhanced habitat. 	
<p>Otter</p>	<p>5km</p> <p>(In addition tributaries of the SAC need to be considered)</p>	<p>JNCC Conserving Natura 2000 Rivers – Ecology series 10 Representation from the Countryside Council for Wales at Preferred Strategy stage.</p>	<ul style="list-style-type: none"> Pollution from a wide range of substances including PCBs (polychlorinated biphenyls) and heavy metals, e.g., lead, cadmium and mercury. Full impacts of these effects are unclear due to the complex way in which they interact in the aquatic environment Water abstraction, which can concentrate pollutants and reduce food availability Loss and lack of wetland habitats associated with rivers, leading to the loss of resting and breeding sites. Development pressures, wetland drainage, intensified riparian management, agricultural cultivation along riverbanks, river engineering and flood prevention measures Loss of suitable resting and breeding 	<p>Lleyn Peninsula and the Sarnau SAC; River Usk SAC; River Wye SAC; River Dee and Bala Lake SAC; Afon Eden - Cors Goch Trawsfynydd SAC; River Teifi SAC; River Tywi</p>

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			<p>sites due to lack of appropriate management of riverside pollards</p> <ul style="list-style-type: none"> • Disturbance from people, dogs and livestock and water based recreation activities such as angling and boating • Accidental death: road and rail casualties • Poor habitat and water quality reducing the sustainability of fish stocks 	SAC; Cors Caron SAC;
Lesser horseshoe bat	15km	Schofield, H. (2010) Lesser Horseshoe Conservation Handbook. Bat Conservation Trust.	<ul style="list-style-type: none"> • Loss of Roost sites including old buildings during the summer and caves, mines and other cave-like places for hibernation in the winter. • Fragmentation of habitat. Summer and winter roosts are usually less than 5-10 km apart. The bats are vulnerable to the loss or disturbance of both summer and winter roost sites and the removal of linear habitat corridors. • The species is particularly sensitive to light. Increased lighting in commuting/foraging areas can cause the bats to abandon the site. • Loss of foraging/feeding habitat. The species prefers sheltered valleys with extensive deciduous woods or dense scrub, close to roost sites. Where habitat 	Tanat and Vyrnwy Bat Sites SAC; Meirionnydd Oakwoods and Bat Sites SAC; Usk Bat Sites SAC;

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			is fragmented, linear features such as hedgerows are important corridors between roosts and foraging areas.	
Hen harrier	5km	Based on the fact that foraging flights appear to occur most frequently within 1 km to 2 km of the nest, although they can extend further (e.g. Schipper, 1973, Picozzi, 1978, Martin, 1987, Arroyo et al., 2005) Ruddock, M. & Whitfield, D.P. (2007) A review of disturbance distances in selected bird species. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Loss of habitat - upland and lowland heathlands, in wetlands and on downlands and other rough grasslands. • Disturbance pressures from increased human activity. 	Berwyn SPA; Elenydd Mallaen SPA; Migneint–Arenig–Dduallt SPA;
Merlin	5km	Ruddock, M. & Whitfield, D.P. (2007) A review of disturbance distances in selected bird species. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Loss of habitat - open habitat like upland and heather moorland. Also found in agricultural areas, especially during migration and winter. • Disturbance pressures from increased human activity. 	Berwyn SPA; Elenydd Mallaen SPA; Migneint–Arenig–Dduallt SPA;
Peregrine	5km	Ruddock, M. & Whitfield, D.P.	<ul style="list-style-type: none"> • Loss of habitat - cliff-ledges, quarry 	Berwyn SPA;

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		(2007) A review of disturbance distances in selected bird species. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<p>faces, crags for nesting, extensive open terrain for hunting</p> <ul style="list-style-type: none"> Disturbance pressures from increased human activity. 	Elenydd Mallaen SPA; Migneint–Arenig–Dduallt SPA;
Red kite	5km	Ruddock, M. & Whitfield, D.P. (2007) A review of disturbance distances in selected bird species. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> Loss of habitat – large trees close to the forest edge for nesting, open habitat for hunting preference for areas with small hills or mountains so that they can use rising air currents Disturbance pressures from increased human activity. 	Berwyn SPA; Elenydd Mallaen SPA;
Greenland white-fronted goose	5km	Vickery J.A.; Gill J.A. (1999) Managing grassland for wild geese in Britain: a review.	<ul style="list-style-type: none"> Loss of habitat – estuarine habitat Disturbance pressures from increased human activity. 	Dyfi Estuary SPA
Chough	1km	Based on studies of foraging distances for breeding choughs (Holyoak, 1972, Bullock et al., 1983, Bignal et al., 1996, Cook et al., 1999, Gray et al., 2004, Whitehead et al., 2006)	<ul style="list-style-type: none"> Loss of habitat - Rocky coasts, coastal heath, natural and semi-natural short grassland. Disturbance pressures from increased human activity. 	Craig yr Aderyn (Birds Rock) SPA;
Marsh	2km	Carmarthenshire Local	<ul style="list-style-type: none"> Increased fragmentation and isolation of 	Aberbargoed

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fritillary butterfly		Biodiversity Action Plan. Butterfly Conservation.	<p>habitats.</p> <ul style="list-style-type: none"> • Inappropriate management of sites including changes • in grazing stock and practice leading to loss of food plant (devil's bit scabious <i>Succissa pratensis</i>) overgrazing, Burning and mowing. • Adults tend to be sedentary and remain in a series of linked metapopulations, forming numerous temporary sub-populations, which frequently die out and recolonise. Where unable to do this, populations do not seem to be able to persist in habitat fragments. It is therefore essential to conserve a cluster of sites in close proximity. • Afforestation and development on habitats. 	Grasslands SAC; Blaen Cynon SAC; Cadair Idris SAC;
Allis shad	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 3. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • Overfishing. • River obstructions to migration. • Deposition of fine sediments reducing quality of spawning sites. • Disturbance through vibrations from development etc. 	River Usk SAC; River Wye SAC; River Tywi SAC;

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Twaiite shad	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 3. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • Overfishing. • River obstructions to migration e.g. weirs or dams. • Deposition of fine sediments reducing quality of spawning sites. • Disturbance through vibrations from development etc. 	River Usk SAC; River Wye SAC; River Tywi SAC;
River lamprey	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 5. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • River obstructions to migration e.g. weirs or dams. • Reduction in quality of spawning sites. 	River Usk SAC; River Wye SAC; River Dee and Bala Lake SAC; River Teifi SAC; River Tywi SAC;
Brook lamprey	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 5. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • River obstructions to migration e.g. weirs or dams. • Reduction in quality of spawning sites. 	River Usk SAC; River Wye SAC; River Dee and Bala Lake SAC;

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				River Teifi SAC; River Tywi SAC;
Sea lamprey	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 5. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • River obstructions to migration e.g. weirs or dams. • Reduction in quality of spawning sites. 	River Usk SAC; River Wye SAC; River Dee and Bala Lake SAC; River Teifi SAC; River Tywi SAC;
Atlantic salmon	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 7. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • River obstructions to migration e.g. weirs or dams. • Physical degradation of spawning and nursery habitat. 	River Usk SAC; River Wye SAC; River Dee and Bala Lake SAC; Afon Eden - Cors Goch Trawsfynydd SAC;

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				River Teifi SAC;
White clawed crayfish	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 1. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Pollution. • Increasing siltation and eutrophication of rivers. • River engineering for hydro-schemes, flood defence purposes and fishery improvements. • Competition from non-native crayfish species. • Crayfish plague. 	River Wye SAC;
Bullhead	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series 4. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Deposition of fine sediments in disturbed catchments. • Fragmentation of populations. • Channel management. • Fisheries management. • Pollution. 	River Wye SAC; River Dee and Bala Lake SAC; River Teifi SAC; River Tywi SAC;
Freshwater pearl mussel	2km (5km where issue relates to general water quality)	JNCC Conserving Natura 2000 Rivers – Ecology series. Representation from the Countryside Council for Wales at Preferred Strategy stage.	<ul style="list-style-type: none"> • Increasing siltation and eutrophication of rivers. • Recent declines in migratory salmonids upon which the larvae depend. • River engineering for hydro-schemes, flood defence purposes and fishery 	River Clun SAC; Afon Eden - Cors Goch Trawsfynydd SAC;

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			<p>improvements.</p> <ul style="list-style-type: none"> Forestry operations, acidification, effluent from fish farms and chemical sheep dip. 	
Floating water-plantain	1km	The species is not mobile as such however pollution effect entering the water course from some distance could have a negative impact	<ul style="list-style-type: none"> Pollution. 	River Dee and Bala Lake SAC; Montgomery Canal SAC; Elenydd SAC; Afon Eden - Cors Goch Trawsfynydd SAC; River Teifi SAC;
Slender green feather-moss		The species is not mobile as such however pollution effect outside the site could have a negative impact	<ul style="list-style-type: none"> Lack of grazing. Pollution from nutrient run-off. 	Mynydd Epynt SAC; Cadair Idris SAC;