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Many tens of thousands of birds stay in Radnorshire throughout the winter provided that the ground does not become frozen and snow cover does not last for any length of time. Noisy flocks of several hundreds systematically probing grasslands is a common sight in the county, as are groups of 10-50 ridding garden lawns of leatherjackets and aerating the soil in the process. At Garnfawr, near Franksbridge, there were 3,000 in the fields throughout the winter of 1987/8 and 5,000 near Llandrindod Wells on 15th February 1974. Large feeding flocks are often present in the Elan and Claerwen Valleys in winter, depending on the tipulid populations. There were 7-8,000 present in the Pont ar Elan area from January to March 2007 and 4,000 at Claerwen Farm on 13th March 1999.

The main roosting area in Radnorshire is in the conifer plantations of the Llanfihangel nant Melan/Llandegly Rhos area which has been used since at least the late 1970s. The plantation by Llandegley Rhos held 20,000 birds on 16th January 1978 and 29th November 1983 and had 10-50,000 occasionally between November and March in most winters between 1986 and 2000. Plantations in the nearby Fforest Inn area used to hold most of the birds with a small wood at Llanfihangel having a roost of 10-60,000 birds for most of the time during the winters between 1984 and 2002. However, shooting of the roost took place at times in an effort to persuade the birds to go elsewhere, which they have done for the most part ever since.

Since 2003 the roost has largely moved to Llandegley Rhos and steadily increased in numbers with counts at dawn and dusk producing average figures of between 135,000 and 180,000 birds. It is likely that even more birds use the roost on occasion especially in early November and late February/early March – soon after the main arrivals from the continent and prior to emigration. The highest counts are made during periods of fine, calm, weather and the fewest during very windy, wet and stormy, conditions when birds presumably find somewhere closer to their daytime feeding areas to spend the night. The current age and planting density of the plantation seems to be ideal for roosting Starlings and although predators such as Hen Harrier, Merlin, Sparrowhawk, Goshawk and Short-eared Owl are in attendance most evenings, the site is undoubtedly safer than ones used in the area in the past.

At least 65% to 75% of the birds now come from areas to the east of the roosting area and this seems to account for most of the increase in numbers as many fewer did so prior to 2001. Birds not only come from all parts of Radnorshire but also from well into Herefordshire with flight lines traced at least as far east as Shobdon. In general birds come in from a radius of c.25km.

Another roost in conifers by Perthi Common (on lower ground about five miles to the south-west of Llandegley Rhos) also held a large roost in some winters between 1987 and 2009 when the site was clearfelled. The site was used mainly as an alternative to the Llanfihangel/Llandegley area during periods

The first Redwings usually arrive in Radnorshire in the second half of September, although in some years when the berry crop in Scandinavia is very heavy and/or the weather is mild and the wind in the southerly half, then the first arrivals may not turn up until early October. Most birds come from Scandinavia but also some at least come to Wales from much further east into Russia and small numbers from the Faeroe Islands and Iceland.

The earliest ever record was in the Elan Valley on 14th September 2011, but after that there were no more in that year until 22nd. There were two on the 17th September in the Elan Valley in 2004 and 11 on the same date at Llyn Heilyn in 1996, accompanied by the county's earliest ever Fieldfare. There has never been an autumn in Radnorshire when the first Fieldfare has been recorded before the first Redwing, although the first dates have coincided in four years.

The main arrivals are usually in October but rarely may not be until early November. Large flocks are recorded either quickly flying through or stopping to rest or feed avidly on Hawthorn and Rowan berries. Huge numbers also pass through at night as their calls are very commonly heard flying overhead after dark. Overall numbers have undoubtedly increased markedly in Radnorshire since the 1980s, possibly a sign of climatic change affecting berry crops elsewhere.

Flocks of hundreds are common whilst four-figure counts are sometimes made: 1,000 flew south-west over Newbridge on 5th October 1984, 1,000 came into the Elan Valley from the east on 3rd November 1986, 3,000 flew south down the Elan and Claerwen Valleys in two hours on 25th October 1990, 3,000 were at Nantmel on 21st October 1995, 1,000 at Newbridge on 10th October 2004, 3,000 at Radnor Forest on 4th November 2008, 2,500 at Radnor Forest on 13th October 2011, 2,000 flew south and east over Llyn Heilyn on 14th October 2011, 1,200 were in the Elan Valley on 17th October 2011 and 1,100 on 29th October 2012.

There have been three very large arrivals of Redwings into Radnorshire. On the night of the 1st to 2nd November 1992 probably many tens of thousands were grounded across the county. Alongside the A44 in the Llandegley/Penybont area there were at least 20-30,000 birds on pastures and in Hawthorn hedges on the early morning of the 2nd and flocks of 300-1,200 were present across the length and breadth of the county. There were still many thousands present for the next two weeks or so but nearly all had moved on by the 21st November by when just about every Rowan, Hawthorn and Holly berry in the county seemed to have been eaten.

Another major arrival took place on 28th October 2006 on which date there were 5,000 at Glasbury, 3,500 at Llanyre, 2,500 in the Elan Valley, 1,000 at Nant Glas and 7,500 flying south-west over Radnor Forest. In October 2009 a roost at the Gwaelod plantation in the Elan Valley held at least 6,650 birds on 15th and 2,000 were counted flying south there on 19th. With the huge numbers of Fieldfares recorded in the Valley on 28th October there were a minimum of 6,000 Redwings and 3,400 still present the following day.

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bird trapped on the hill above Llanstephan which may be the same as another, undated, of a specimen obtained in the county and in the Maesllwch collection.

A male was killed by a gamekeeper near Glasbury in January 1907 after which there were no records until a ringtail was seen at what is now the top end of the Claerwen Reservoir on 23rd October 1952. Another ringtail was seen near Womaston on 1st December 1953 and a ringtail and an adult male in the same area two weeks later.

There were a few records in most years in the 1960s and 70s gradually increasing to 11 in 1979. Throughout the 1980s and early 90s there were probaby at least six birds overwintering in the county mostly on the central hills from Beacon Hill and Radnor Forest south to Llanbedr Hill and occasionally on the Elan uplands. However, a roost at Rhosgoch Bog held up to 12 birds in the winter of 1986/7 and there were six roosting there regularly in January 1999. Favoured habitats are heather moorland, *Molinia* grasslands (especially in vole years), bogs, commons and extensive clearfelled areas of conifer plantation. Most autumn/winter records fall between late August and early/mid April with peaks at both extremes indicating the passage through the county when birds have been seen widely on farmland and sometimes purposefully flying high south or north.

Breeding seems likely to have taken place in at least one or two years in the 1970s with one to three pairs regularly from 1983 to 2001 and up to eight pairs annually since then with an increasing number of birds summering. Although the occasional nest has been in deep, tussocky, *Molinia*, a lack of rank, ungrazed and unburnt, heather moorland for nesting seems to be the major limitation on breeding numbers.

There have been four recoveries elsewhere of nestlings ringed in Powys and found in their first autumn or winter in Devon (hit overhead wires), Kent (caught by another ringer), Spain (shot) and Portugal (caught by another ringer). A nestling female ringed in Gwynedd was found breeding in Powys five years later.

## Montagu's Harrier Circus pygargus

Very rare passage migrant which may have bred in the 19th century.

Breeds from north-west Africa, Iberia, France, Denmark and the Baltic countries south to Italy and Turkey and east across Russia to the Yenisei. Winters in India and sub-Saharan Africa.

The birds referred to as Hen Harriers in the Woolhope Naturalists Field Club *Transactions* of 1895-7 as being present in the Elan Valley may have been of this species.

weather on 25th November and another ringed near Abbeycwmhir on 27th June 1976 was killed by a car in Lincolnshire on 10th September (286 km ENE). Other birds ringed elsewhere and found in Powys have come from Clwyd (2), Dyfed, Gwent, Hereford & Worcester (3), Shropshire and Staffordshire and a Powys ringed bird was found in Gwent.

A nestling ringed at Keminmaa, Lappi, Finland, on 1st July 1996 was found dead for some weeks near Gilfach, north of Rhayader, on 23rd November (2,179 km SW).

## Merlin Falco columbarius Rare breeding bird; passage migrant and winter visitor.

Breeds from Iceland, the Faeroes, the British Isles and Scandinavia east across Russia to Kamchatka and the Bering Sea, south to Manchuria, northern Mongolia, Kazakhstan and Uzbekistan. Mostly migratory; wintering in USA, central and northern South America, southern, central and western Europe, the Arabian Peninsula, north-west Africa and from

Afghanistan east to China and Japan.

Ingram and Salmon (1955) reported the Merlin's status as, a breeding bird in relatively small numbers ... thirty or so years ago its numbers were appreciably greater than they are today.'

There seems little doubt that the decline has continued due mainly to the huge losses of heather moorland in the 1960s which were replaced with improved grassland and, to a lesser extent, conifer plantations. Also corvid numbers have tripled since the mid-1970s and competition for nest sites in isolated moorland-edge trees and predation of eggs has increased as has the predation of adults and flying young by Goshawk and Peregine since the late 1980s. Organochlorine pesticides undoubtedly had some effect on Radnorshire Merlins as an egg analysed in the 1970s had the highest concentration of PCBs (polychlorinated-biphenols) ever found in a Merlin's egg at the much higher than lethal level of 24.3 parts per million.

A complete and thorough survey has never been undertaken, and would be very difficult. However, in the late 1970s up to ten pairs were found whilst in the 1980s visits to previously used and likely places found six to eight in 1987, nine in 1988, 13 in 1991, seven in 1998 and 10 in 1999. Thirteen pairs were found in 2003, nine in 2006, seven in 2007, eight in 2008, 12 in 2010 but just six in 2011 and seven in 2012.

In the past nest sites were usually in old corvid nests in ffridd hawthorns and also, rarely, on the ground in extensive areas of rank heather moorland. Nesting in conifers started as early as 1956 when two nests were found in old Buzzard and Carrion Crow nests. Today, close to the edge of a conifer plantation bordering heather moorland is the commonest nesting site although hawthorns are still used, especially

Although 90% of records are of single birds, three to eight birds have been recorded from one to four sites each winter since 1994 and prior to then three were below Glasbury in March 1980 and four were at Nantmel on 5th December 1971. Double-figure counts made using dragged ropes have been; at Rhiw Bottom, 14 on 22nd December 2011 and 10 on 8th January 1999; at Pentrosfa Mire, 16 on 3rd December 2000 and 12 on 21st November 2004; and at Rhosgoch Bog, 14 on 10th January 1993. Other regular sites are Beacon Hill, Maelinydd, Garreg Llwyd, The Begwyns, the upper Elan Valley, Pwll Patti and the lower Wye, Llanbwchllyn, Llyn Heilyn and Moelfre. Individual birds are often very faithful to very small sites. One bird returned to a short length of rushy wet ditch on The Begwyns for three successive winters.

The majority of records come from the months of November to March. There have been just three records in the first half of October, with the earliest being one on Maelinydd on 1st October 1971, and two in the second half of April, the latest being on Beacon Hill on 29th April 1962.

## Snipe Gallinago gallinago

Uncommon but widespread breeding bird; frequent passage migrant and winter visitor.

Breeds from Iceland, the British Isles, France and Scandinavia east across Europe and Asia to far eastern Russia and south to Kazakhstan and northern China. Also much of Canada, the northern USA, South America and eastern and southern Africa. Northern populations are migratory to South and Central America, southern and western Europe, sub-Saharan Africa and southern Asia east to Japan and the Philippines.

The Maesllwch Estate game books record that several visits were made most years between 1870 and 1935 to Rhosgoch Bog to shoot Snipe. A total of 1,610 birds were shot over 41 seasons with the most being 112 in 1871 and 86 in 1910. The most shot in a day was 26 on the opening day of the Snipe season (1st August) in 1902 with 15-19 on eight other August dates and 19 on 12th December 1911. It is likely that well over 100 birds were often present at Rhosgoch Bog during the autumn and winter in those days. The site was also important for breeding birds as 'considerable numbers', as well as a nest with eggs, were found there by members of the Woolhope Naturalists Field Club on 30th May 1911.

The species was also undoubtedly a much commoner breeding bird in the past than it is today due to the widespread drainage of land which has taken place, especially since the 1950s. However, it is still frequent in the wetter areas of upland moorland and bog throughout the county, as well as on most lowland bogs, mires and wet commons.

The largest population today by far is in the Elan uplands, a large unimproved drinking water catchment area which has not been subjected to the extensive drainage works elsewhere. In a survey in 1995 there