Introduction
The Welsh Kite Trust and the Shropshire Raptor Study Group again tried to find the nests of all breeding pairs of Red Kite in 2018. Since the first nests were found in 2005, and the first successful breeding in 2006, significant results include:

1. 232 nests (163 successful) found and monitored
2. At least 296 fledged young
3. 203 fledged young tagged in the nest
4. 28 tags read on individual nesting adults, some seen over several years.
5. 25 nests were found in 2018, the third most successful year.

Monitoring 2018
Twenty-five nests were found, three less than last year, but access was refused to monitor one of them. More nests were found in 2017 (28), the highest number yet, and 2014 (26). Nine were at new sites.

The nests found were concentrated in the south-west hills (17 out of 25 were in SO27, 28, 37 and 38), but fieldwork by the Raptor Group was concentrated in these areas. Reports of Kites in the north of the County, and the south-east, would be gratefully received.

Some of these nests are very close together: two are only around 400 metres apart, both have been occupied for five years, and for the last four years both have been successful. One of the new nests is less than 2km from another nest occupied since 2010. Several other pairs have neighbours within three kilometres.

Seven further pairs were located or reported: one started building a nest near Rorrington (SJ20V), but did not finish it, while a pair were seen and reported nesting near Llanyblodwel (SJ22), but the outcome is unknown. Two young were raised near the former site last year, while the landowners of the latter site report that Kites have been present in the wood for 2-3 previous years. No nests were found for any of the other five. The nest near Llanblodwel is the first definite report from the Oswestry uplands.

Only four of the nests failed, and 20 are known to have been successful (the highest successful number to date). The outcome of one nest is unknown, where permission to monitor was refused. Assuming that all chicks large enough to tag survived, at least 29 young fledged from them (not as high as last year (32) or the three years 2014-16 (31 in each year), or as high as 2011, when 36 fledged).

Seven of the fledged young from four nests were ringed and tagged. 2018 tags are cerise with blue letters and a black bar on the right wing, and black with yellow letters and a cerise bar on the left wing, as shown in the photo of a brood of three tagged at a nest near Pontsford (SJ40).

In common with previous years, the high turnover of nest sites continued. Ten nest sites used in 2017 were not occupied. Nine nests were at new sites, while 17 other sites, which have had breeding Kites in earlier years, were also checked, without result. However, 7 pairs used the same nest as last year, and 9 moved only a very short distance.

Two unsuccessful nests were found in 2005, and between then and 2014, 59% of the total nest sites used in that 10 year period were used for one year only.

Figures for 2017 and 2018 include a nest literally on the County border, near Bromfield. The border is a stream, and the wood was on the Herefordshire side, but the nest over-hanged the Shropshire side of the stream.

The first nest site north of Shrewsbury (5km) that was occupied in 2017 was not reoccupied in 2018, but the other 2017 nest in the northern half of the County (the SJ ordnance survey grid squares), 10km south-west of Shrewsbury, produced the three young in the photo above. The nest near Llanyblodwel (SJ22) is the furthest north reported so far.

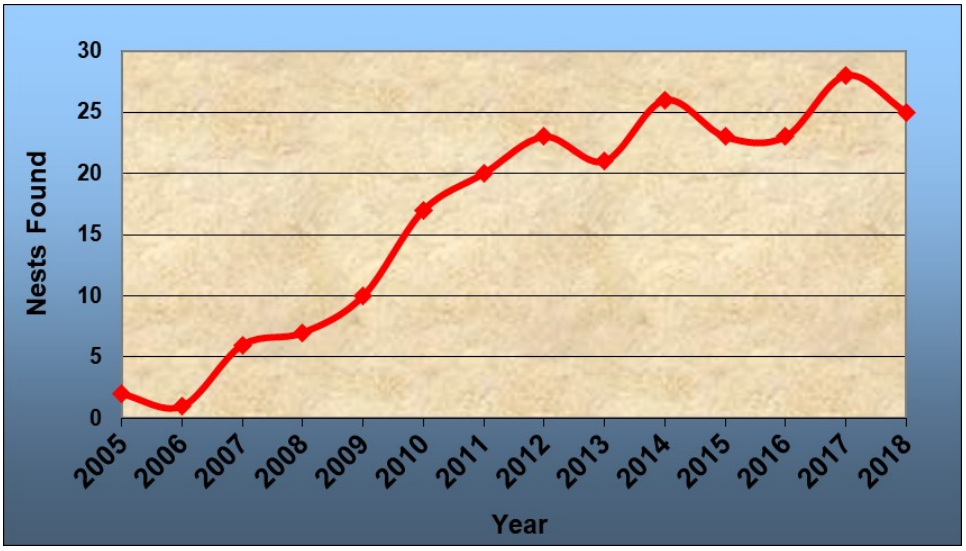
There were many reports of individual birds in the north, including several in the vicinity of Shrewsbury and Telford, so breeding is expected there in the near future, if it hasn't occurred already. The steady move eastwards probably continued, but a nest on Wenlock Edge which was occupied successfully for the three years 2014-16 was not re-occupied, and although several Kites were seen in the vicinity of Brown Clee and Titterstone Clee, no nests were found. Last year's site east of the A49 road, near

Ludlow, was not re-occupied in 2018, but an unsuccessful nest was found near Longville, 8km east of Church Stretton.

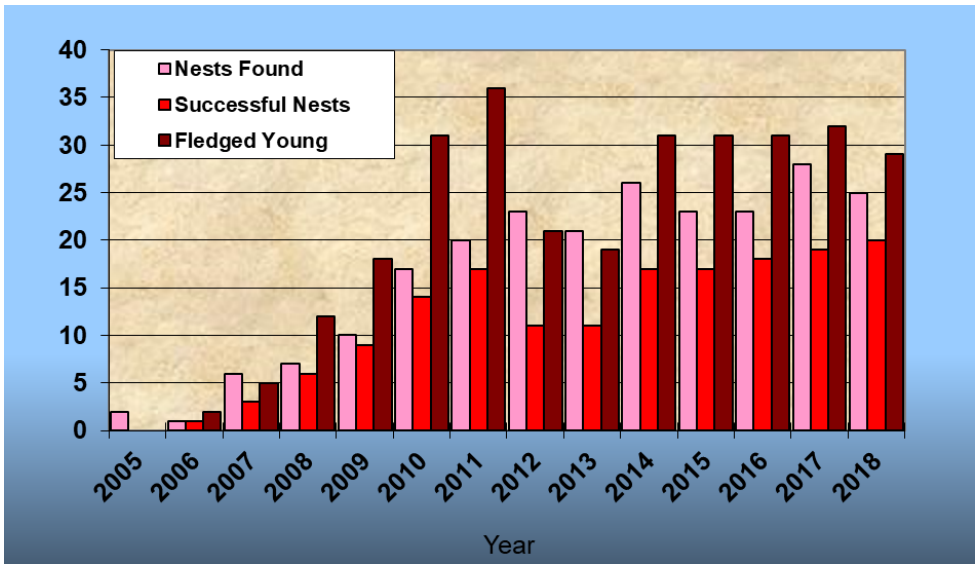
As the population increases and spreads, nests become harder to find, so the breeding population is now undoubtedly well over the 31 pairs located in 2018, and the same number in 2015.

Comparison with Previous Years

The number of nests has grown rapidly, as shown in the chart. The number found in 2017 was the highest in one year since Kites returned to breed here in 2005, after an absence of 130 years. Since then, a total of 232 nests have been found, and 163 (70%) have been successful.



There were more fledged young (36) in 2011, from only 20 found nests, but at least 29 fledged in 2018, compared with 32 in 2017 and 31 in each of the three years 2014-16 inclusive.



Since the first successful breeding in 2006, at least 298 young are known to have flown from Shropshire nests, and 203 have been tagged. The number of nests found, successful nests and fledged young in each year is shown in the chart, and summarised in the table.

Nests and Outcome	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Nests Found	2	1	6	7	10	17	20	23	21	26	23	23	28	25	232
Successful Nests	0	1	3	6	9	14	17	11	11	17	17	18	19	20	163
Fledged Young		2	5	12	18	31	36	21	19	31	31	31	32	29	298
Productivity / Nest		2.00	0.83	1.71	1.80	1.82	1.80	0.91	0.90	1.19	1.35	1.35	1.14	1.16	1.29
Productivity / Successful Nest		2.00	1.67	2.00	2.00	2.21	2.12	1.91	1.73	1.82	1.82	1.72	1.68	1.45	1.83

Productivity

Since the first successful nest, average productivity has been 1.29 fledged young per nest found and 1.83 per successful nest. Productivity varies from year to year, affected mainly by weather conditions. In 2018, hard weather at the start of the nesting season was followed by a prolonged hot drought, conditions which probably adversely affected the number of eggs laid and the availability of food for the chicks in the nest, resulting in a high success rate, but the lowest productivity per successful nest since 2005. In comparison, 2017 was the driest spring for many years, and June was partly wet and windy, and partly very hot, with the worst productivity since 2012 and 2013, which were both badly affected by severe weather. Figures are shown in the table.

As usual, productivity in Shropshire nests was considerably higher than in the adjacent monitoring area in East Powys, where the comparable figures were an average of 0.92 fledged young per nest found and 1.38 per successful nest since 2003, and 0.6 and 1.1 respectively in 2018. Better productivity in Shropshire is attributed to better weather (generally warmer and drier), and better food supply.

White Kite

A white Kite was seen several times throughout 2017 near Bridges, and was seen in the same area again in the early spring, but not subsequently

White Kites are leucistic, lacking the brown pigment in the feathers. They are not true albinos, as they do have pigment in the cere and legs (yellow as normal), and in the iris in the eye.

This is believed to be a result of the genetic bottleneck in the Welsh population, when there were only two breeding females in the 1930s, and it affects about 1 in 150 Kites. Few have attempted to breed, but all those that have are males, so they may all be males. None are known to have bred successfully.

The absence of pigment makes the feathers less robust and much more prone to wear and tear. The tail feathers of the bird in the photo are very worn.

Poisoning

In 2014, an adult was found dead on the ground directly under one nest. There were no visible signs of injury or persecution, but the landowner had used rat poison in a nearby barn. Two well grown chicks were later found dead in the nest, presumably from the same cause. Rat poison is a common cause of death, and it is found in potentially lethal amounts in most dead Kites sent for post-mortem. The corpse of this adult was sent for post-mortem analysis immediately after it was found, but preliminary results were not received until 24 January 2017. Extensive haemorrhaging was found, similar to that “found in birds in which high levels of anticoagulant rodenticides have been detected”, and samples were sent to the Predatory Birds Monitoring Scheme for further analysis. No further results have been received.

Wing Tags

There were 9 tagged birds at Shropshire nest sites in 2014, but the number has declined since, with 8 in 2015, 5 in 2016, and 4 last year. In 2018, there were six, including four from last year. Of the four, one unsexed seven-year-old was found again near Craven Arms, at the same site that it occupied in 2014. It was not recorded in 2015 or 2016, but was probably present in the same place in those years too. Another unsexed seven year old was present at a site near Bucknell for a second year, and a seven-year-old female was present at her nest site near Bishop’s Castle for the fifth consecutive year. A five year old female nested just west of Clun for the second year running; she had nested at a different site in 2016. All of these individuals had been tagged in the nest at nearby sites: two had moved 7km from their natal sites, one 4km and one 2km.

A tagged male was seen for the first time, definitely number 46 with white letters, but the light was poor, and colour indicating the year was not definitely identified. However, it was definitely a “red spectrum” colour, but not scarlet (previously used in 2003, before any bred in Shropshire), so the only possibility is cerise from 2009. Cerise 46 was one of a brood of two raised near Bridges, 13km distant, and was 9 years old in 2018, the oldest seen this year or in any previous year.

A tagged female nested near Lydham but the tagged could not be read, or the colour identified.

An eight-year-old female, tagged at a Shropshire natal site near Knighton in 2010, was found for the third year running at a nest in Wales, west of Knighton and just over 6km south of her natal site, and she too may have been at this site in previous years.

A total of 29 different tags have been read at nest sites, 13 males, 12 females and four sex unknown. Males have moved an average of 17 km from their natal site, and females 17km. However, three of these (two males and a female) were long-distance colonisers from Wales in 2007 and 2008. If these three are excluded, the averages are 8km for males and 10km for females. If subsequent colonisers from Wales and the female returning to Wales are also excluded (i.e. only birds that moved within Shropshire are included) the averages are 7km for males but still 10km for females. These figures illustrate again how sedentary Kites are, but there is a tendency for females to move further.

The average age of first breeding is 2.5 years, and average age of last observed breeding is 4.3 years (including 5 still alive). Three have reached 7 years old. The previous oldest (before the observation of cerise 46) was killed by a car, early in 2015, 8years 7months 7days after ringing.

Yellow/black T0 was photographed near Shawbury. It was the first chick tagged in a nest north of Shrewsbury, in 2017.

Photographers who take digital pictures of Kites are requested to blow them up and check for wing-tags. If the photo is sharp, the tag can often be read, as in this case, and such photos provide very useful information.

One tag was read at the Linley roost site (see below), Yellow/black 07 that nested near Lydham in 2017.

Two tagged Kites were reported dead.

The first was found in April, near Bishop's Castle. Red/Yellow/Black F4 (2012) was ringed as a single chick near Llangadfan (about 20km west of Welshpool), and about

60km from where it was found. As it was six years old, it may perhaps have been breeding in the area at an undiscovered site.

This is a long distance travelled for such a sedentary species. The second was more typical, found only about a kilometre from its natal site, close to the River Teme near Knighton, in August. It was a brood of one, tagged in 2014.

Reporting Tagged Kites

Reports of tagged Kites should be sent to Leo Smith (contact details below), or reported online to the Welsh Kite Trust website, www.welshkitetrust.wales The photos of the two corpses were supplied by the finders.

Winter Roost Sites

Kites often form roosts in the mid-winter months. The first roost was found near Kempton early in 2009, with up to 14 kites present, but only one tagged individual was seen at the roost on all six visits. Assuming that the turnover of tagged and untagged kites was the same, around 20 different individuals used the roost. A larger roost was found at the same site in 2010, and the tagged birds indicated that the majority were one-year-olds from Wales. The furthest travelled came over 100km, and four more came more than 50km. The roost was visited 43 times, no individual was present for as many as half the occasions, and seven out of 17 tagged individuals were only seen once. A second roost, near Wentnor, was also found in 2010. Tags suggested that most there were one-year-olds from Shropshire nests. Again, knowing that individuals did not join the roost every night, and assuming that the turnover of tagged kites was the same as untagged kites, around 60 different individuals were present at the two roosts in 2010. Only three were seen at both roosts.

Subsequent attempts have been made to find winter roosts. One of up to 32 individuals was found in 2012, but the birds disappeared quickly into the wood, and no tags could be read. No regular roost site was found in the following three years, but three winter roosts were found and monitored in 2016 (near Aston-on-Clun, maximum of 39 on 22 January; near Norbury, maximum 17 Kites on 23 January; and near Wentnor, maximum seven on 27 January.

In 2017-18, four roosts were found, near Onibury (max. 6 on 19 January), near Lydham (max. 29 on 27 December 2017), near Kempton (max 9 on 13 February 2018) and near Aston-on-Clun (29 on 2 and 29 January), all in the far south-west of the County.

Two individuals were seen near Linley on 28 December 2017 included Yellow/black 07 (see above).

Another roost of about 30 was reported near Kempton on 23 November 2017, including Orange/black/yellow A4, about 3km from its 2017 natal site near Aston-on-Clun.

The ratios in 2009 and 2010 suggested that the total number of Kites using the roosts was double the maximum on any one night, and there was little exchange of individual birds between roosts. The maximum counts in early 2018 total over

70, so the total number of birds in the roosts in the south-west is therefore estimated at around 140 individuals, an increase of 100% on the 2010 figure. The number of tagged birds was surprisingly small, with only one noted, but the roosts were usually at the top of a hill, so it was often impossible to reach a position for reading tags.

The future of Kite Tagging

It is getting increasingly difficult to tag a high proportion of the population, and the number found at breeding sites has been declining steadily since 2010#. It was decided to continue tagging chicks in the nest in 2017, in the hope of reaching 200 tagged young from Shropshire nests. Unfortunately, we did not achieve that, but a further seven were tagged in 2018, bringing the total to 203.

To ensure that as much as possible is learnt from the tagging, finding nest sites in the hope of locating tagged adults will continue until 2020, by which time most of the surviving Kites tagged in 2017 should have joined the breeding population.

If anyone knows the location of a 2018 Kite nest, or finds one in 2019 or subsequently, please don't assume we know about it. Please tell Leo Smith 01694 720296, leo@leosmith.org.uk

Further Information

A similar monitoring report for the adjacent area of East Powys (Radnorshire), and other information, can be found on the Welsh Kite Trust's new website www.**welshkitetrust**.wales

Leo Smith
October 2019
Apologies for the delay in producing this report, due to time being committed to finishing The Birds of Shropshire, to be published in December 2019

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