



White-tailed eagle project
Newsletter 2009



**This newsletter is produced by the RSPB on behalf of the
Sea Eagle Project Team**

This newsletter reports on the progress made by the white-tailed eagle re-introduction project that commenced in 1975 when young white-tailed eagles, imported from Norway, were released on the west coast of Scotland.

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Cover photograph by Ian Croall.

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Summary of the 2009 breeding season

The number of territories occupied by white-tailed eagles in the west of Scotland in 2009 reached 46, two more than the previous year. The new territories, located in Lewis and Wester Ross, marked a significant increase in range in both regions. These new additions bring the total number of territories located in the Western Isles to 12, while there are 11 on Skye and 10 on Mull. The number of mainland territories has now reached nine, which includes five in Wester Ross and four in Lochaber / Argyll.

2009 also saw a new high in the number of young fledged, with 24 territorial pairs successfully fledging 36 chicks, two more than the previous high recorded in 2007. A further 15 pairs attempted to breed, but failed either during incubation or around hatching. Overall, productivity was good, with 0.92 young fledged per breeding pair. Wester Ross and the Small Isles did particularly well with the five breeding pairs in these areas each raising twins. However, the overall picture masks a fairly disastrous year for Skye white-tails, where only six of the 11 territorial pairs were confirmed to have bred and only two of those were successful in raising chicks. Disturbance from forestry operations were undoubtedly a contributing factor at two sites, but it does not explain the full extent of the continued poor productivity among white-tailed eagles on the island.

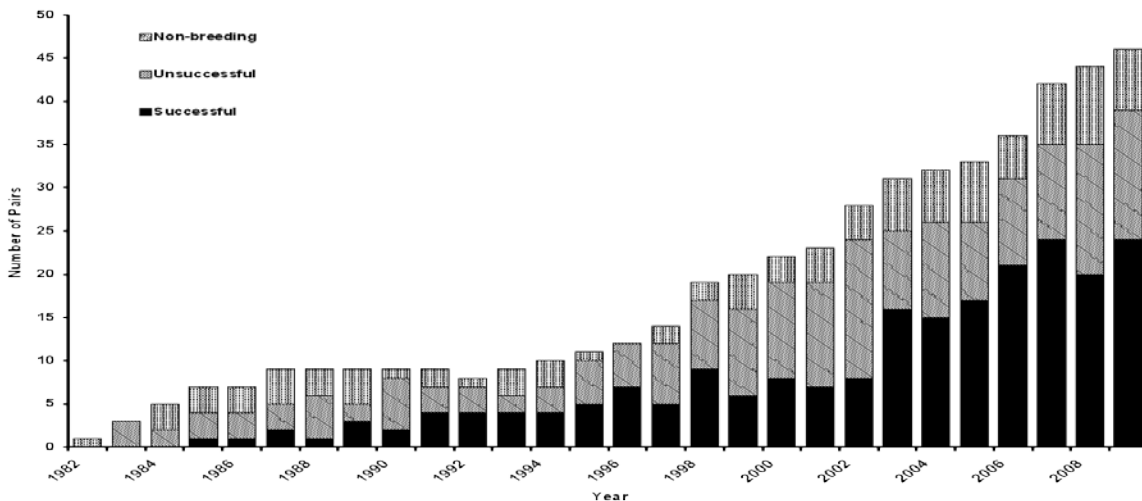
33 of the 36 fledged young were ringed with BTO rings and black over blue colour rings. In addition, five chicks were fitted with satellite tags. Two of those were in Mull, one on Skye and two in the Western Isles.

Over 500 sightings of sea eagles in the west of Scotland were reported in 2009, including white-tails released on the east coast in 2007 and 2008 which were observed in Skye, Morvern, Dumfries and Galloway. One Norwegian import released in Ireland which was carrying a satellite tag took a west of Scotland vacation over the summer and autumn, spending time in Mull, Islay, Knoydart, Kyle of Durness and Easter Ross and even made it as far north as Orkney before returning to Ireland.

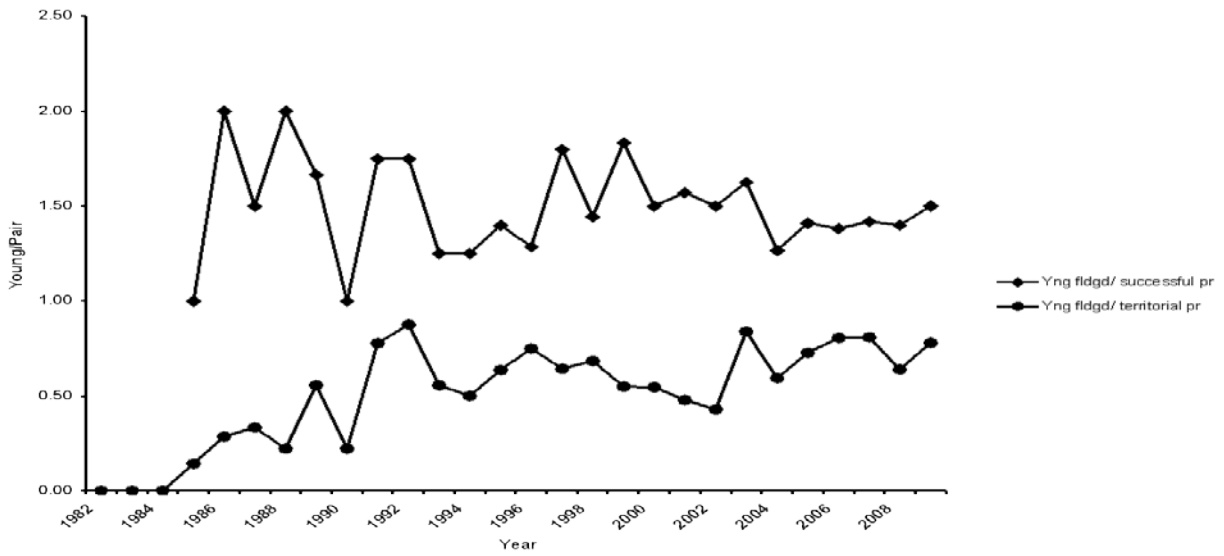
Ten-year summary 1999 – 2009

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Areas occupied	20	23	24	26	31	32	33	36	42	44	46
Territorial pairs	20	22	23	25	31	32	33	36	42	44	46
Clutches laid	16	19	17	22	25	28	28	31	35	35	39
Broods confirmed hatched	9	12	10	14	20	19	21	25	31	21	31
Successful broods	6	8	7	8	16	15	17	21	24	20	24
Young fledged	11	12	11	12	26	19	24	29	34	28	36
Young fledged per breeding pair	0.69	0.63	0.65	0.55	1.04	0.68	0.86	0.94	0.97	0.85	0.92
Young fledged per territorial pair	0.55	0.55	0.48	0.48	0.84	0.59	0.73	0.81	0.81	0.64	0.78

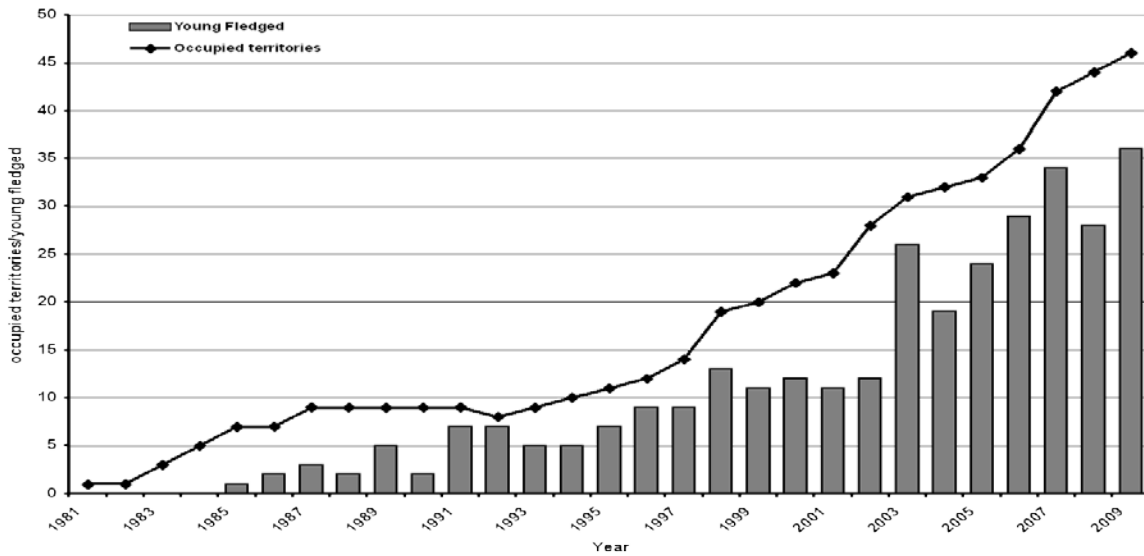
Charts showing progress of the breeding population 1982 – 2009



Number of successful breeding pairs, failed breeding pairs and non-breeding (breeding not proven) pairs of white-tailed eagles in Scotland, 1982-2009.



Fledged brood size (young fledged per successful pair) and productivity (young fledged per territorial pair) of white-tailed eagles breeding in Scotland, 1982-2009.



Number of occupied territories and young fledged in Scotland, 1982-2009

Territory accounts for 2009

Skye summary 2009 - Eleven pairs occupied territories on Skye. Eight pairs attempted to breed, but only two pairs were successful, fledging three young. Young were fitted with BTO and colour rings only. The colour ring combination for this year was black over blue.

Site code	Male ID.	Female ID.	Breeding activity	No. young fledged	Colour ring number & sex
7	01 white S	untagged	No nest was located for this pair, however, only the male was seen during observations in April, which suggests the pair may have laid. By early May the pair was seen perching on skerries within their territory and had clearly failed.	0	
8	untagged	untagged	This pair used the same nest as '08, hatching by 06/05. They fledged their fourth set of twins since 2003. This pair was regularly fed fish supplements by tour boats.	2	Female B8/97 Female B8/98
11	untagged	99 red O	This pair used the same nest they have been using since 2005 and were brooding a single chick by 08/05. The chick was satellite tagged by Natural Research staff.	1	Female B8/99
24	untagged	untagged	The pair was observed building up the same nest as in '08 and appeared to settle but both were behaving strangely, incubating intermittently. They had abandoned the nest site by 30/04.	0	
31	untagged	untagged	The adult pair was present but possibly not breeding as nest building was not observed and no nest located within their territory. A large amount of felling and forestry operations had been carried out within the territorial area over the winter.	0	
35	untagged	untagged	Presumed to be the same pair, they built up their '08 nest site but then moved ca. 5km from this tree site to an exposed sea cliff site. They hatched by 08/05 but failed shortly after.	0	
36	00 yellow V	untagged	The same pair incubated on their original nest site but failed by late May.	0	
42	untagged	untagged	The birds used the same nest site as in '07 and '08. The female was brooding on 06/05 but failed soon after following a period of northerly gales.	0	
43	untagged	untagged	This pair nested in a platform constructed in a spruce in 2008 but had failed by 08/05. This is only their second breeding attempt since 2006. To date it is not known whether the male is the same as in '08 as he is untagged but has a dark edge to the tail.	0	
47	03 pink E	03 pink H	The '08 nest was built up, however, the birds moved to an area of plantation on the opposite side of the hill and built a new nest in a spruce in a section of wind throw. The nest was precariously located between a standing spruce and a fallen tree. The pair failed by 06/05 and eggshell was found below the nest.	0	
50	02 blue T	untagged	Laid on the same nest as built up in '07 and '08 - a platform constructed in a spruce - but failed soon after hatching. This was the first breeding attempt for this pair.	0	

Argyll Islands summary 2009 - The total number of pairs occupying territories remains at eleven. Ten of these pairs are on Mull and one pair is on another island in south Argyll. Nine pairs laid, eight pairs hatched young and eight breeding attempts were successful, fledging eleven young.

Site code	Male ID.	Female ID.	Breeding activity	No. young fledged	Colour ring number & sex
1	untagged	untagged	Thought to be the same replacement female since 2001 with the same replacement male since 2004. They bred successfully in the nest they used in 2008. They hatched two but fledged one chick called Venus which was fitted with a satellite tag and was filmed feeding on a deer carcass at Loch Frisa in November.	1	Female B8/70
2	untagged	untagged	Thought to be the same pair as in previous years (now both thought to be about 30 years old) nested in their old 2002 site after they were disturbed by a photographer at their regular site in 2008. They were successful and fledged two female chicks. The ringing of the two chicks was filmed for Blue Peter.	2	Female B8/71 Female B8/72
18	94 untagged Ringed left leg	92 green L Ringed right leg	Mull's public viewing pair built another new nest late on at the south end of Loch Frisa. They reared two chicks to 10.5 weeks when the male, called Bracken, died after falling from the nest. The other, a female named Heather, successfully fledged in July and was seen with the adults well into the autumn.	1	Female B8/75 Male B8/76
19	untagged (93 red X)	Untagged (92 green O)	This pair nested in their successful 2006 site but that success was not to be repeated. They failed at or near to hatch point coinciding with a spell of very cold, wet and windy weather. The adult female was probably the bird involved in a serious fight with the female 'yellow black spot' at Territory 29; both survived.	0	
20	94 yellow 0	96 grey L	This peculiar pair continued their pattern of half-hearted breeding attempts again this year at a new nest and although some incubation behaviour was observed, they were not proven to have laid or properly incubated eggs. By June they had resumed their daily habit of perching together on rocks near the shore.	0	
21	94 yellow X	98 green X	The same pair as previously returned to their nest from 2008. They successfully fledged two chicks.	2	Not Ringed
27	untagged (96 grey O)	untagged (95 white O)	This usual pair were closely monitored after moving to a new site near the coast and very close to a golf course, housing estate and hotel. After a late start due to the nest being damaged by strong winds and then re-built, they fledged two chicks for the first time in their breeding history. Both female chicks, named Pitch & Putt, were seen flying well on Mull and on the mainland nearby in September.	2	Female B8/79 Female B8/89
29	untagged (95 white X)	00 yellow black spot	The same pair returned to their 2008 nest and successfully fledged one male chick which was regularly seen on the shoreline with the adults in the autumn. The female was involved in a serious fight probably with the female from Territory 19. Both survived relatively unscathed.	1	Male B8/74
33	97 blue 9 (remnant of tag)	98 green T (right wing only)	The same pair returned to their 2008 nest and successfully fledged one chick. The male chick, named Oran, was fitted with a satellite tag and dispersed relatively quickly. In early autumn he was on Morvern and by November he had wandered south to Jura and then on to the nearby mainland.	1	Male B8/73
48	untagged	03 pinkT	This same pair returned to nest on an island to the south of Mull, fledging one male chick which had a close call when the whole nest slipped due to wet weather. With the nest hanging almost vertically in the tree, the chick perched on top - the adults were still able to feed him. There has also been a sighting of their first chicks which fledged in 2007: White F was on Mull in autumn 2009 perched with east coast 2007 bird 7 at Territory 33.	1	Male B8/88
51	02 blue X	04 green X	This Mull-fledged pair continued to frequent a large territory spanning north Mull and the Ardnamurchan mainland. Their early attempt at a new nest on Mull was too late for them to breed this year.	0	

Western Isles summary 2009 - one new pair established on Lewis, bringing the total number of pairs occupying territories to twelve. Eleven pairs laid and seven breeding attempts were successful fledging nine young. Young were fitted with BTO and colour rings only. The colour ring combination for this year was black over blue. In addition two chicks were satellite tagged.

Site code	Male ID.	Female ID.	Breeding activity	No. young fledged	Colour ring number & sex
3	untagged	untagged	In mid-April, one of the adults was observed incubating on the same nest as '08 within their core nesting area. A single chick was ringed and assumed to have fledged as the nest site was too remote to visit later in the season.	1	Female B8/95
9	untagged	untagged	The pair built up a nest last used in '05 but did not lay. A nest previously used in '07 by this female and the original male was being used as a roost.	0	
17	untagged	untagged	Successfully fledged a chick from their original nest site, which was first built-up in 1995. This pair has now produced nineteen chicks since 1996.	1	Male B9/03
30	98 green F	untagged	Returned to their '06 nest site and successfully fledged one chick despite northerly gales during incubation.	1	Female B8/96
34	untagged	untagged	Moved across the sea loch to build a new nest on a small crag and fledged twins for the fourth year in a row. B9/05 was satellite tagged by Natural Research staff.	2	Female B9/05 Female B9/06
39	untagged	04 green 3	Old female replaced by 04 green 3, fledged from site 23 in Wester Ross. They incubated on the '07 nest but by 11/05 the pair were known to have failed after incubating over-time.	0	
41	untagged	untagged	The female was observed incubating on their original nest on 12/04 and the pair went on to produce their first set of twins since establishing their territory in 2005. They have now fledged five chicks and have only failed in '08.	2	Female B9/00 Unknown B9/01
44	untagged	untagged	Bred successfully on the same nest as '07 and '08.	1	Female B9/04
45	untagged	02 blue K	Used the same nest as in '07 and '08 but failed. The female was observed incubating over-time on 13/05.	0	
46	03 pink L	03 pink S	The pair returned to their original nest site to breed. The chick was satellite tagged by Natural Research staff. A fresh triggerfish was found in the nest in September during the post-fledging prey analysis collection.	1	Male B8/94
52	04 green N	untagged	'09 was the first breeding attempt for this pair, which failed before hatching. On 08/05 a peregrine falcon was observed incubating 10m from the nest.	0	
54	05 red H	untagged	The male was the first chick produced by site 41 in 2005. They were seen nest building on 02/04, laid and hatched but failed soon after hatching. Ravens were seen removing prey items from the nest shortly after failure.	0	

Mainland and Small Isles summary 2009 – Twelve pairs occupying territories, one new pair located. Nine pairs laid and six pairs were successful fledging ten young. No evidence of breeding was found at the new site. Young were fitted with BTO and colour rings.

Site code	Male ID.	Female ID.	Breeding activity	No. young fledged	Colour ring of young
6	untagged	untagged	This pair used a cliff nest last used in 2003 which necessitated observations being made from 1km distant. The adults were observed taking fish in to feed the chicks.	2	Female B8/83 Female B8/84
10	89 yellow	untagged	Nested in an existing sea cliff cave site. The cave is 4-5m deep and very difficult to monitor without causing disturbance.	2	Male B8/81 Male B8/82
12	untagged	Site 4 female	The female carries an ice blue stub of wing tag on her left wing indicating that she is the 1991 female originally from territory 4. Incubating by 25/03, but failed by 08/05, probably at egg stage or around point of hatch. They used a new nest lower on the same cliff as previously occupied.	0	
22	94 yellow 8 lost 1	untagged	Using same nest as used for the last five years. Prey remains were collected in late May, early - mid June and post fledging to provide enhanced dietary analysis as part of the Wester Ross lamb mortality study.	2	Female B8/90 Male B8/91
23	untagged	untagged	Moved from traditional inland tree nesting area to nest at a coastal crag site. Nest in small willow too unstable to safely access to ring the chicks. Leaf growth obscured observation of the chicks during much of their development. Both adults are now without tags.	2	Not Ringed
28	untagged	untagged	Believed to be the same pair as previously. Built new nest close to '08 nest. Fledgling still present in natal area in late October	1	Female B8/80
37	01 white T	98 green 0	Built new nest in larch tree in traditional nesting area. Despite minor disturbances from walkers, this pair successfully raised twins for the first time. Prey remains collected from the nest in late May, mid June and post fledging as part of the Wester Ross lamb mortality study	2	Female B8/92 Male B8/93
38	untagged	99 red I	A notable year for this pair – it being the first time they have fledged young – and twins at that. Predominantly fulmar represented in diet remains found in nest contents post fledging.	2	Male B8/77 Male B8/78
40	Ring only	00 yellow O	Thought to be the same pair as in 2008. Used the same nest as in '08 but failed a few days after male observed calling frequently while incubating. The female was not seen over this period.	0	
49	03 pink O	untagged	The same pair used the same nest as in '08, over 10 km from the coast. Failed during incubation.	0	
53	04 green	04 green A	First breeding attempt of this pair using nest located in autumn '08. Adults incubated over time, one egg found in nest after abandonment, probably infertile.	0	
55	05 Red 4	06 Yellow 2	New young pair holding territory. Built up nest in Scots pine but did not appear to lay any eggs.	0	

Colour-ringing and sightings

Colour-ringing



2009 was the second year that the Scottish White-tailed Eagle Project participated in the International Colour Ringing Programme co-ordinated by Bjorn Helander in Sweden. As in 2008, Scottish ringed birds were fitted with a BTO ring on their right leg and the year code ring of the international programme (black over blue) on the left leg. No birds from the east coast release project were fitted with colour rings in 2009, only wild-bred chicks from the west coast population.

Of the 36 chicks fledged in the wild in western Scotland in 2009, 30 were fitted with BTO and colour rings. Colour ring codes ranged from B8 70 – B8 99 and B9 00 – B9 06.

Sightings

The number of sightings received by fieldworkers, volunteers and members of the public since December 2008 exceeded 350. As many of the reports referred to more than one individual, the number of bird observations for 2009 was over 533. In many cases no tag information was given, either because the birds were untagged or because it was not possible to see if tags were present. However in 200 cases tags were seen and the tag colour was recorded, and in 92 cases it was possible to read the tag legend and individually identify the bird. One immature white-tailed sea eagle was identified from a photograph, which enabled the colour rings to be read. This bird, '08 white over red A9 72, was seen twice in Lochaber this year.

The majority of observations related to non-territorial juvenile, immature and sub-adult birds with '07 white-tagged birds being most frequently sighted. In addition, '06 yellow and, less commonly, '05 red, '04 green and '03 pink-tagged birds were recorded. Birds thought to be of west coast origin were seen as far south as Mull of Kintyre and as far North as Orkney.

Sightings of east coast and Irish release birds on the west coast are becoming increasingly common. In 2009, 2 Irish birds were observed; '07 yellow/white X at Loch Ba, Mull in October and '07 yellow/white L was seen twice in Lochaber early in the year. There have been repeated observations of east coast released birds '07 white 5 bars and '07 white 7 bars in Mull throughout the year. These individuals have also been located on Mull using radio tracking equipment. Other east coast release birds have also been located in Mull and Lochaber using radio-tracking equipment.

Selected sightings reported in 2009

All sightings are of non-territorial individually identified birds

Date	Bird details	Location seen	Ringing location
20/05/09	2004 adult Green F	Ardgour, Lochaber	Wester Ross
20/04/09	2004 adult Green T	Shell Hill, Orkney	Skye
10/02/09	2005 sub-adult Red Y	Stilligarry, South Uist	Harris
11/11/09	2005 sub-adult Red 2	Rhiddoroch, Wester Ross	Wester Ross
25/10/09	2005 sub-adult Red 3	Rhiddoroch, Wester Ross	Wester Ross
26/03/09	2006 imm Yellow C	Glen Eynort, Skye	Mull
03/03/09	2006 imm Yellow G	Killiechronan, Mull	Mull
23/02/09	2006 imm Yellow H	Loch Scridain, Mull	Mull
06/04/09	2006 imm Yellow K	Gleann Gael, Morvern	Argyll
12/02/09	2006 imm Yellow L	Ardfin, Jura	Mull
10/03/09	2006 imm Yellow N	Claggan, Morvern	Mull
11/02/09	2006 imm Yellow O	Ormaclete Machair, South Uist	Mull
06/09/09	2006 imm Yellow O	Shuna Island, Argyll	Mull
12/02/09	2006 imm Yellow P	Ardfin, Jura	Mull
05/10/09	2006 imm Yellow T	Glendale, South Uist	Skye
21/08/09	2006 imm Yellow V	Loch Ravag, Skye	Skye
09/12/08	2006 imm Yellow X	Loch Ba, Mull	Mull
23/02/09	2006 imm Yellow 1	Glencrip, Lochaber	Wester Ross
13/09/09	2006 imm Yellow 8	Loch Shell, Lewis	North Uist
01/02/09	2006 imm Yellow 9	Loch Shell, Lewis	North Uist
01/12/09	2006 imm Yellow black spot	Loch Ba, Mull	Rum
15/09/09	2007 imm White A	Torran Rocks, Lochaber	Mull
09/05/09	2007 imm White E	Dervaig, Mull	Mull
11/12/08	2007 imm White F	Dervaig, Mull	Jura
02/02/09	2007 imm White H	Loch Euport, North Uist	Wester Ross
22/02/09	2007 imm White L	Inverscaddle Bay, Lochaber	Mull
09/02/09	2007 imm White S	Berg, Mull	North Uist
16/03/09	2007 imm White T	Loch Ba, Mull	Skye
10/04/09	2007 imm White V	Bracadale, Skye	Skye
19/04/09	2007 imm White Y	Ose Valley, Skye	Harris
19/04/09	2007 imm White Z	Sgurr Mor, Skye	Lewis
25/06/09	2007 imm White Z	Cellar Head, Lewis	Lewis
29/06/09	2007 imm White 1	Borgh, North Uist	Lewis
23/03/09	2007 imm White 3	Loch Ba, Mull	Wester Ross
08/06/09	2007 imm White 4	Loch Portain, North Uist	Small Isles
01/11/09	2007 imm White 9	Ormsary, Argyll	Lewis
02/12/09	2007 imm White black spot	Loch Ba, Mull	Skye
09/05/09	2007 imm White 5 bars	Dervaig, Mull	East coast
19/10/09	2007 imm Yellow/white L	Loch Ba, Mull	Ireland
22/01/09	2007 imm Yellow/white X	Glen Kingie, Lochaber	Ireland
09/11/09	2008 juv White/red A972	Loch Lochy, Lochaber	Lochaber

Re-colonisation of former range

East Scotland

2009 chicks

Fifteen chicks (8 females and 7 males) were met by Environment Minister Roseanna Cunningham at Edinburgh airport on 26th June. These included two large female chicks from a nest of triplets. Sadly, one chick died in captivity this year from Aspergillosis. All birds were fitted with turquoise wing tags with white legends and vhf radio backpacks prior to release. All birds were released between the 12th and 25th of August.



Photo: Elaine Fraser

Tag	E	H	K	L	O	P	V	X	Z	1	3	5	7	8
Sex	F	F	F	F	M	M	M	M	M	F	F	M	F	M

Tag legends and sex of white-tailed eagles released in Fife, August 2009.

Movements

At the end of October six birds continued to use the food dump regularly and roost in/around the release wood. Other birds have reached Lunan Bay, Isle of May, Forfar and Blackford. Three 2009 birds are roosting with 2008 birds East of Perth. One bird from 2008 and three from 2007 are currently in Midlothian, whilst 'Ralf', a 2008 male, has now spent over a year on the Buchan coast. The communal roost established in September 2008 east of Perth is still in use, peaking at 8 birds in January 2009. White-tailed eagles are now seen regularly in the Carse of Gowrie and the Sidlaws.

February 2008 saw another SW shift of the birds into central Scotland, and one female spent an afternoon in England on the Solway before retuning to Dumfries. White 7 spent the summer on Shetland before returning to Mull at the end of August, where white 5 also remains, white F was sighted around Loch Sunart in September.

Mortality

Six dead birds have been recovered since April 2009. Of the two 2008 birds, cause of death of one is unknown, and a second was a train casualty. Of 2009 birds, two were train casualties, one electrocution and one collision with overhead wires. This brings the recorded losses to 10 of 44 white-tailed eagles released since August 2007.

West coast/Irish visitors

2009 has seen an increase in sightings of young west coast birds in East and Central Scotland with sightings of 2006 birds at Loch Leven, Loch Davan and Glen Turret. A 2008 Irish male was also seen near Braco over the summer.

Public engagement

East Scotland white-tailed eagles have featured in a year long exhibition, 'Return of the Natives', in Perth museum, which was run as part of the year of Homecoming and ended in January 2009. The RSPB film unit has made a 20 minute film about the project which can be viewed at the museum or at www.green.tv/rspb. Outreach to schools in Tayside and Fife continued this year and ten public talks were delivered. Media interest in the East Scotland releases remains high.

East Scotland White-tailed Eagles is a partnership project between RSPB Scotland, SNH and Forestry Commission Scotland who host the release site. We would like to thank the Hutchison Family, Mrs Thomas and Ardmores Highland Single Malt for their kind support of the project. Updates: <http://blogs.rspb.org.uk/eastscotlandeagles/default.aspx>

Sightings can be reported to Claire Smith at eastscotlandseaeagles@rspb.org.uk or phone 01738 630783.

Ireland

As in winter 07-08 most birds wintered in upland areas in south Kerry. Unlike 2007 many birds remained in the hill areas through spring and summer 2009 where there was abundant sheep carrion. Several birds moved to the Lough Currane/Ballinskelligs Bay area of SW Kerry (40-50km SW of the release site) in early March, remaining until early May. Birds from the 2008 cohort continued to use communal roosts established in winter 2007-08 by older birds in valleys west of the release area in Killarney National Park.

Table 1. Long distance movements of WTSEs in 2009

Bird (tag)	Sex	Release Year	Date	Location	Distance (km)
X	F	2007	3/2	Glen Garry, Scotland	632 NE
9	M	2007	17/4	Inishowen, Donegal	390 NNE
L	M	2008	29/5	Westray, Orkney	910 NE
H	F	2008	3/8	Glen Artney, Perthshire	602 NE
Star	M	2009	23/8	Mullaghmore, Sligo	280 NNE
F	F	2009	21/8	N Antrim, NI	414 NE
II	F	2009	12/10	Lough Neagh, NI	355 NE

Mortality

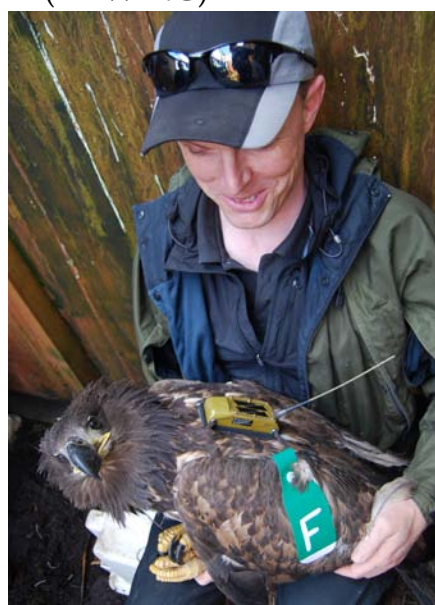
Four birds were found dead up to Oct 2009. Of 55 birds released to date (including the 2009 cohort) eight have been recovered dead. A 2007 male was found dead near Killarney on 12/3. Tests revealed Carbofuran poisoning. A male and female were found in the Lough Currane area of SW Kerry in late April. Extensive toxicology analyses in Ireland and Scotland proved negative. A fourth bird was found on 13/7 at Kenmare Bay. This male had injured its leg in transit to Kerry in 2008 and was wholly carrion dependent post-release in 2008.

2009 release

A further 20 chicks (13 females and 7 males) were collected in Norway in June 2009 and released in Killarney NP in August. Although most remained in the vicinity of lakeshore food dumps for 1-2 months after release, in contrast to previous years almost all had dispersed or moved to a mountain area south of the release area by mid-September. At least three made long distance movements (Table 1), two birds within 2 weeks of release and without ever visiting food dumps. Two satellite tracked birds (Star and F) continued to utilise very small ranges following long distance movements. One (Star) has been documented feeding on gulls and dead seals and has remained coastal over the past two months.

2009 TAG COLOURS: GREEN (LT WING)-WHITE (RT WING)

TAG	SEX	RELEASE
—	F	7-8-09
≡ (3 bars)	F	7-8-09
▲ (semi-circle)	F	7-8-09
F	F	7-8-09
#	F	7-8-09
P	M	13-8-09
R	M	13-8-09
⋮	F	13-8-09
II	F	7-8-09
%	F	7-8-09
★ (Star)	M	7-8-09
•	M	7-8-09
◆ (diamond)	F	13-8-09
■	M	13-8-09
∨	F	13-8-09
\$	F	13-8-09
▲	M	13-8-09
<	M	13-8-09
D	F	4-9-09
C	F	18-9-09



All tags carry a colour-bar at the base of the tag that identifies the colour of the tag on the other wing (eg., a white bar on the base of the green tag on the left wing and vice versa in 2009).

England

Work continued in identifying a suitable site for white-tailed eagles in England. A potential location in North Norfolk was dropped due to opposition from some local landowners. The Suffolk coast had been identified early on in the project as offering good possibilities, but the focus had shifted to Norfolk due to some concerns over the effect that the release of large numbers of white-tailed eagles might have on the important population of bitterns in the Suffolk coast marshes. However, detailed studies of published white-tailed eagle diets and discussion with experts across Europe where the two species co-exists have shown that bittern predation is practically unknown. Consequently, after briefly considering some alternative sites, the project announced on 24 September that it was once more considering the Suffolk coast. With the help of Roy Dennis we have identified some ideal potential release sites there.

Feasibility studies are underway as are preparations for an application for a licence to release Schedule 9 birds. Contacts have been made with the key personnel in Poland, who hopefully will be supplying our birds.

The project team will work, so far as possible, with representative bodies such as the Country Land and Business Association (CLA), National Farmers' Union (NFU) and British Association for Shooting and Conservation (BASC) to try and develop management and mitigation packages which will enable the eagle project to proceed without any undue detriment to other interests. (There are very large intensive outdoor poultry and pig rearing units in East Anglia.) The Food and Environment Research Agency (FERA) have been contracted to carry out this work. There will also be consultations with other interest groups and landowners in the vicinity of the release area.

In September, a public opinion poll was conducted in coastal Suffolk and encouragingly almost 80% of respondents supported the aims of the project, a similar result to a poll that had been carried out in Norfolk a year earlier. Another boost to the project was gaining the endorsement of the Suffolk Coast and Heaths Areas of Outstanding Natural Beauty (AONB) partnership following a meeting with them in November.

The earliest that white-tailed eagle could be released in Suffolk is summer 2010 but there is an awful lot of work to do before then!

Wales

All studies for the Welsh WTE reintroduction were completed in 2009 and made ready for submission to the National Assembly for Wales for licence application. If a funding application is successful the first release of white-tailed eagles in Wales could happen in 2011.

Steve Watson on behalf of the Eryr Mor Cymru Management Group

Satellite tracking white-tailed eagles – 2009 Natural Research Ltd

A partnership project involving Natural Research Ltd, Highland Foundation for Wildlife, Forestry Commission Scotland, Scottish Natural Heritage and RSPB began in 2008 on Mull when two chicks were satellite tagged at Loch Frisa. In 2009, two more were tagged on Mull and an additional three at sites elsewhere in Scotland by Natural Research Ltd. The following account tells the story so far...

As part of a collaborative project three battery powered PTT (Platform Transmitter Terminal) satellite tags were attached to large (approx. 8-9 week old) white-tailed eagle nestlings in the 2009 breeding season. All three birds dispersed from their natal area, by the end of November (Table 1). The birds tended to disperse to coastal areas, travelling up to 100km from the natal site during the first few months (Figure 1).

Table 1. Dispersal dates of three white-tailed eagle chicks fitted with satellite transmitters during the 2009 breeding season. Dispersal date is based on the first date the bird was over 10km from the nest site, but did not return to within 5 km of the nest site.

Tag #	Location	Sex	Dispersal date
93443	North Uist	Female	29/09/09
93444	Lewis	Male	10/11/09
95127	Skye	Female	31/10/09

All three birds are live and well. It will be interesting to follow these three young birds during their first few years of life.

93443

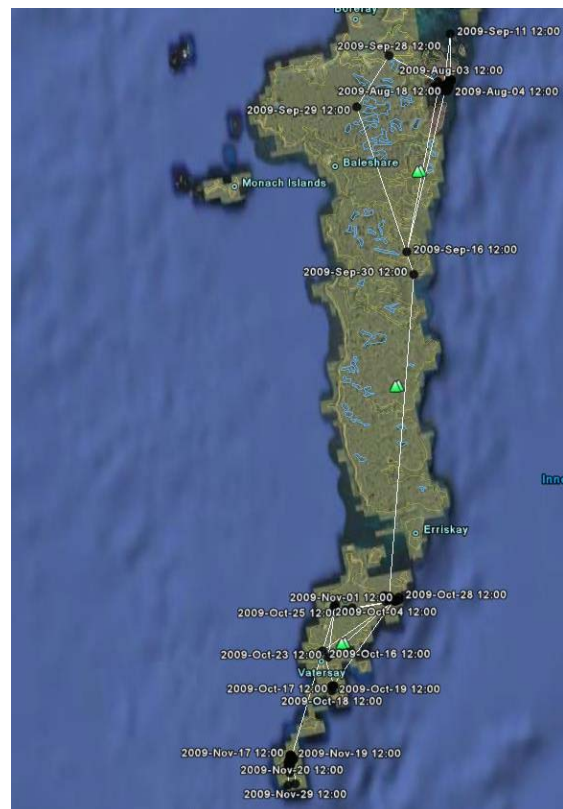
This bird was the first of the three to disperse, following an exploratory movement on the 16/09/09 when it was located 23km to the south of the natal area. Once dispersed this bird moved to Barra, where it has remained in the general area since 01/10/09.

93444

This bird is the most recent of the three birds to disperse, moving to the sea lochs and east coast of Lewis on the 10/11/09. During the dependence period this bird remained close to the nest on the sea loch where it was reared.

95127

After a couple of exploratory movements in October this bird dispersed, exploring a few areas of the Skye coastline, including Portree Bay. This bird has since left Skye and is on the mainland near Mallaig. As this is the first of the three birds to reach the mainland, it will be very interesting to see which areas it visits.



Flights of Bird 93443

Gairloch Lamb Cohort Study

In 2009 SNH commissioned The Food and Environment Agency (FERA) to conduct a study into lamb survival in areas of the Gairloch peninsula with resident white tailed eagles in response to Wester Ross crofters and farmers concerns about the level of unexplained lamb losses in recent years. The study delivered an unprecedented level of scrutiny and detail by recording the behaviour of sheep flocks and presence of white tailed eagles in typical highland conditions. Using radio tracking technology and almost 600 hours of systematic fieldworker observation, the project team followed and recorded the fortunes of 58 lambs from April to mid August on three holdings on the Gairloch peninsula. The radio tags were fitted with a mortality chip designed to trigger after two hours of inactivity to allow project staff to locate lambs and especially those that had died. Although there were difficulties with their attachment due to their design, the tags worked well. None of the tagged lambs were taken by white-tailed eagles and lamb losses in the general area were significantly less than in previous years. White-tailed eagle flight activity was recorded over all the hill areas but not over the study plots at Cove or Sands in-bye. Of six untagged dead lambs found by FERA staff in the study areas, post mortem examination showed one with poor body condition had died from puncture wounds which are likely to have been inflicted by a golden or white-tailed eagle.

The findings of this detailed scientific assessment carried out by FERA on the impact and behaviour of white-tailed eagles in the context of sheep husbandry in the Gairloch area have provided further insight into the wider understanding of the likely impact of white-tailed eagle predation on lamb populations in the West Highlands. In line with those findings from previous studies carried out on Mull and data collected elsewhere in the white-tailed eagle range in the highlands and islands, the impact of white-tailed eagle predation on lambs in the Gairloch area was shown to be low in 2009.



White-tailed eagle dietary studies 2009

In parallel with the lamb survival study conducted by FERA in 2009, RSPB conducted a detailed examination of the diet of sea eagle chicks based on the prey remains found in the two successful nests in the Gairloch area. Material was collected on two occasions when chicks were still in the nest and aged between five and nine weeks old, and on a third visit, after the chicks had fledged. For comparative purposes, three nests from elsewhere in North Scotland were also studied. Skeletal remains were identified to species level, with the minimum number of individuals represented derived from the number of the most common body part. Measurements of lamb tibia, metacarpals and metatarsals were used to give an estimation of the age and a count of the number of individuals represented.

The most common prey item in all nests studied was fulmar, with the majority of other items comprising a range of seabirds and shorebirds. Lamb remains were found at all sites, and in each prey collection made in Wester Ross since 2006, but the number of individuals represented was consistently small. In many cases an individual was only represented by one or two bones or body parts. This pattern is consistent with previous collections at these sites and all other sea eagle sites throughout north Scotland over the past ten years. It is also consistent with the results of the five-year intensive study conducted on Mull (Marquiss *et al* 2003).

In 2009, 77 prey items were identified from the Gairloch nest and 56 from the Loch Maree nest, both of which fledged two chicks. The three other nests, each with one chick, contained between 23 and 48 prey items. Remains from one or two lambs were found in four of the nests. At Gairloch, parts of 11 lambs were represented in 2009 compared to four and five in 2008 and 2007 respectively, when one chick was reared. Remains representative of nine of the 11 lambs were delivered to the nest before the end of May. Lamb remains found at the Loch Maree nest have ranged from 2-4 in the past three years while at Gruinard up to six individuals were represented annually between 2006 and 2008. No fresh lamb carcasses were recovered from either Gairloch or Loch Maree during 2009 and as a result it was not possible to assess whether any of the lambs delivered to the nests had been killed by the eagles or whether all had been scavenged after dying from a different cause. By way of comparison, Marquiss *et al* (2003) found that 75% of lamb carcasses diagnosed during their five-year study were scavenged as opposed to being killed.

This work was jointly funded by RSPB and SNH.

Smola windfarm, Norway



The Smøla wind farm has been fully operational since 2005. Unfortunately, there is no sign of a reduction in the number of white-tailed eagle collision fatalities with a total of 28 collision fatalities recorded, seven in 2009. Most collisions are still associated with the breeding season. Just a single chick was raised within the wind farm in 2009.

An On-the-spot-Appraisal on behalf of the Bern Convention took place in June 2009. Eckhart Kuijken carried out the appraisal and his report is critical of the way in which the Smøla wind farm was handled by the Norwegian Government.

PC Finlay Christine



Photo: Caroline Davies

Sgt Angela MacDonald of Strathclyde Police on Mull presents Wildlife Crime Officer PC Finlay Christine with his framed white-tailed eagle photograph by Iain Erskine. Finlay retired in 2009 and pioneered the Mull Eagle Watch protection scheme as part of Operation Easter.

Memories of Mike Madders



Many involved in white-tailed eagle conservation will have known Mike Madders who died in a tragic canoe accident with his young son Daniel on Loch Maree in August 2009. Mike worked on Mull in the 1980s when the first white-tailed eagles settled on the island. After many years on Mull, he moved to Islay and latterly Poolewe. In addition to his expert knowledge and studies on birds of prey in the UK and abroad, he was also a successful businessman.

He founded and was a Managing Director for the environmental consultancy and charity Natural Research Ltd which is working with Mull Eagle Watch on the satellite tracking project. A full tribute to Mike is on the Natural Research Ltd website.

I first met Mike in 1984, we were new recruits to the RSPB and were about to be dispatched on a secret mission to a mystery island. White-tailed sea eagles, recently released on the Isle of Rum, had started to be seen regularly on Mull. There were the first tentative signs of nesting and the first eggs had been laid. Remarkably, some of the birds we watched there in those first few days are still there and breeding to this day, this year raising two chicks. The magic of Mull swept us along and my time working with Mike on this historic project had begun. Within a day or two we had made our first major discovery of an active white-tailed eagle nest a long way from our base at Loch Don.

I recall Roger Broad saying when we 'phoned in that night for some guidance: *"Well, you two seem to be doing pretty well on your own!"* I guess for two rookie white-tailed eagle field workers we weren't doing too badly for our first 48 hours on Mull. Forging new and long lasting relationships with local farmers which continue to this day, we watched the nest round the clock come rain or shine. The male of the white-tailed eagle pair was immature; the female 'Blondie' was mature but their breeding attempt was unsuccessful. Mike and I were back in 1985 to continue where we left off. This time our white-tailed eagle pair had moved to a new nest in a remote part of central Mull. Our eagle watch began again in mid March and conducted our continuous nest observations in what was noted at the time as one of the wettest summers on record.

Fast forward to a rare dry, sunny April morning. I called Mike on the CB radio and the now legendary message crackled back at me: *"I think we're both daddies"*. And that's exactly how we all felt. Blondie and her mate had hatched and were feeding the first white-tailed eagle chick to be raised in Scotland for 70 years. The chick fledged and began a dynasty which continues to this day with our very own Frisa who was raised by Blondie and her mate in 1992. From those exciting, pioneering days with one chick on the wing, we end this season with a record 36 chicks fledging in Scotland including an amazing 10 chicks on Mull alone. A fitting legacy for Mike. He helped get them to this point and should have been justly proud of his work.

Our condolences to all of Mike and Daniel's family, colleagues and friends.

David Sexton
RSPB Scotland Mull Officer

Mull Eagle Watch: Public Viewing Loch Frisa, Isle of Mull 2009



Frisa (17) & Skye (15) were present all winter in their usual haunts around Loch Frisa. They spent some time restoring their old 2006 nest, at the same time building a new nest near to their 2008 site. This latter attempt progressed well and it is where they went on to incubate eggs and raise two chicks to 10.5 weeks. Sadly at that point part of the nest gave way and one chick, the male, fell out and died of his injuries. The female chick went on to fledge successfully at 12 weeks of age. The superb Forestry Commission Scotland hide was moved into position and fitted out in time for opening to the public in March. A second hide with a direct view to the nest was provided in an adjacent field. Good views of the adults and chicks on the nest were possible all season and visitors were treated to sightings of golden eagle, hen harrier, peregrine, osprey, black-throated diver, otter, birds on the feeding station and sand martins nesting in the nearby quarry. The booking service for summer trips with Sea Life Surveys ended in August when Craignure Visitor Information Centre took over for the autumn and began a new trial winter opening season staffed by Debby Thorne of the RSPB. The adults chick were seen very frequently throughout the year and many visitors appreciated the greatly extended season. The original two chicks, a male 'Bracken' and a female 'Heather' were named by pupils from Ulva Ferry Primary School.

Elsewhere on Mull two other chicks, a male called 'Oran' and a female called 'Venus' were fitted with satellite tags in year two of a research study into juvenile white-tailed eagle dispersal. Their progress can also be followed online via www.rspb.org.uk/wildlife/tracking/mulleagles.

A 'Fledge Party' – thank you event, which over 50 people attended was held at the hide on 20 September. Mull and Iona Primary Schools visited the hide as did other educational groups from the UK; a record figure of over 6000 people visited and over £20,000 was raised (split 50:50 between Mull Eagle Watch and local good causes on Mull & Iona); the project again received widespread media coverage in national newspapers and was featured on BBC One's 'Blue Peter' and 'Animal 24:7'(Rpt), BBC Alba, BBC Radio Scotland's 'Out of Doors' and Sky 1's 'Bill Bailey's Birdwatching Bonanza' in January 2010; the sat tag story continued to be featured on the 'Autumnwatch' website, the BBC film 'Eagle Island' was shown in the USA and RSPB's 'Eagle Odyssey' was on Australian TV.



Photo: John Cable

BBC Blue Peter presenter Andy helps Roger Broad and Dave Sexton ring the two chicks at Territory 2. The programme was shown in November.



Mull Eagle Watch (Forestry Commission Scotland, RSPB Scotland, Mull & Iona Community Trust, Scottish Natural Heritage, Strathclyde Police) is a member of 'Wild Scotland'. Grateful thanks to volunteers, Island Engineering, Sea Life Surveys, Craignure Visitor Information Centre, CalMac and Crerar Isle of Mull Hotel. Sightings received from wildlife tour companies, fish farms, farmers, locals and visitors. Optical equipment provided by Viking Optical Ltd. Sat tag project funded by SNH and assisted by Roy Dennis' Highland Foundation for Wildlife, FCS, Justin Grant and Natural Research Ltd. We're grateful to the police which assist each year, especially to PC Finlay Christine who retired in 2009, funding partners: SNH, BBC Wildlife Fund and to all who supported, visited and donated to the project in 2009. As ever, special thanks to the McDowall family and Mr & Mrs Leeming at Loch Frisa for their continued cooperation and involvement with the white-tailed sea eagles and the public viewing project throughout the year.

Public viewing Isle of Skye 2009

2009 was the tenth year of the white-tailed eagle exhibition at the Aros Centre – so time to update the interpretation and refresh the exhibits. When the doors opened in early April, visitors were wowed by the fantastic new images of white-tailed eagles kindly donated by Heartstone Ltd, various white-tailed eagle artefacts and the knowledge and experience of Graham Ross or Chris Tyler to guide them through the exhibition. The favourites with kids and adults alike were the life-size silhouettes which allow a true comparison between white-tailed eagles, golden eagles, buzzards and the visitors themselves!

The pair of white-tailed sea eagles which are the stars of the show on the screen were busy building up their nest through January and February, but frustratingly opted to move to an inaccessible location some distance away. Eggs were laid in a crude nest, but the pair seemed rather unsettled in their new location with its commanding views. Exposure to stormy weather may well have been an issue for them at this site. Nevertheless, they continued attending the nest for several weeks, but sadly gave up before the eggs hatched.



Live footage continued to stream from the 2008 nest, revealing occasional visits from the territorial pair as well as other individuals using the nest as a perch or temporary roost site. It was disappointing not to be able to share in the domestics of a full white-tailed eagle breeding season, but all was not lost. Chris and Graham had a large bank of Skye footage to draw from and some excellent footage on an Estonian nest site to boost their presentation. This extension to the period of live viewing brought a certain intrigue and discovery to each day during a period not normally observed on camera. Over the seven months that the exhibition was open, around 5000 visitors were enthused by their encounter with the Skye white-tailed eagles.

The White-tailed Eagle Exhibition is an RSPB project operating within the Aros Centre Ltd. We are grateful to the directors and staff at Aros Ltd who continue to support the white-tailed eagle programme. Chris Tyler and Graham Ross for their continued dedication and the crofters, landowners and fishermen who continue to support this project. For the spectacular new sea eagle images donated to the exhibition at the Aros Centre we would like to thank Heartstone Ltd.

Acknowledgements

In addition to the acknowledgements elsewhere in this Newsletter, we would like to thank the following for their help and support with the white-tailed eagle project: all the landowners and land managers, all the observers who have submitted sightings of sea eagles, Bjorn Helander of the Swedish Museum of Natural History for the provision of colour rings as part of the International Sea Eagle Colour Ringing Programme. Thanks to Natural Research Limited for DNA work.

Get involved!

Have you seen a white-tailed eagle?

The Sea Eagle Project Team is keen to receive sightings of sea eagles and encourage observers to send reports to the RSPB who collate the information on their behalf. Many birds have distinctive wing-tags and as of 2008, young birds in the west of Scotland have been fitted with a coloured leg ring. Details of these and their inscriptions are especially important. Please phone or send any information to your local RSPB office, or to the North Scotland Regional Office in Inverness. You may wish to make a note of these details before you call.

Date	
Time	
Location	
Grid reference (if possible)	
Number of birds	
Age of birds	
Distinguishing marks	
Activity	

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The Sea Eagle Project Team is a partnership between RSPB, Forestry Commission Scotland, Scottish Natural Heritage, Natural England and individual experts. Other organisations and experts participate by invitation.



Photo: Kim Park

If you would like further information on sea eagles go to www.rspb.org.uk
or if you would like additional copies of this newsletter visit
<http://www.rspb.org.uk/ourwork/library/newsletters.asp>



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