



2016 Report.



Photo: John Crispin Alexander, Swampy, and their soon-to-be ringed chick, Somerset, July 2016.

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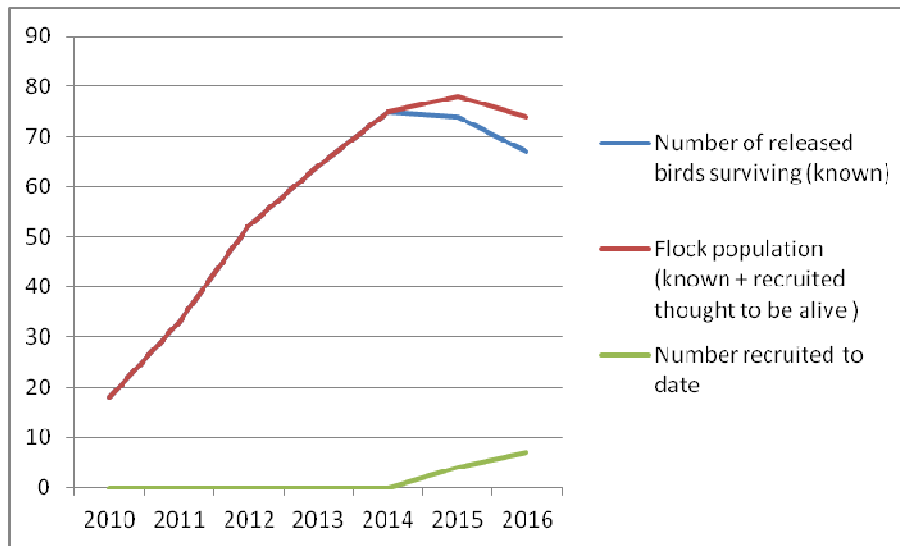
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1.1 Population Stats / Survival estimates

Table 1. Population Summary table.

Total population of 'known alive' released birds at end of previous year 31 st Dec 2015	74
Maximum possible population of released birds at end of previous year 31 st Dec 2015	75
Total population of 'known alive' released birds at end of this year, 31 st Dec 2016	67
Maximum possible population of released birds (including birds missing <1yr) measured at end of this year, Dec 31 st 2016	68
Total release birds known to have died during year Jan 1 st 2016 - Dec 31 st 2016 (Chris, Stanley, Buttercup, Willow, Swampy)	5
Total release birds moving into 'unknown >1yr' status during period Jan 1 st 2016 - Dec 31 st 2016 (Minnie)	1
Total release birds moving in 'unknown <1yr' status during period Jan 1 st 2016 - Dec 31 st 2016 (Midnight)	1
Percentage change in Known Alive release bird population Dec 31 st 2015 cf Dec 31 st 2016	-9.5 %
Percentage change in Possible Max release bird population Dec 31 st 2015 cf Dec 31 st 2016	-9.3%
Total chicks fledged / recruited into the population during 2016	3
Number of fledged chicks from 2016 known to be alive through re-sightings	3
Total chicks fledged from previous years (2014 – 0; 2015 - 4) (unable to assess what % are surviving due to lack of ringing)	4
Estimate of previous year's chicks known to be alive (3 unringed in Somerset – likely Alex and Swampy's chicks and Gemma's from 2015, plus 1 (beaky) at Slimbridge.	4
Total chicks fledged to date	7
Previous Total flock population estimate - MAXIMUM (Max possible population of ringed released birds plus total chicks fledged to date recorded at 31 st Dec 2015) [75+4]	79
Current Total flock population estimate - MAXIMUM (Max possible population of ringed released birds plus total chicks fledged to date recorded at 31 st Dec 2016) [68+7]	75
Previous Total flock population estimate - MINIMUM (Known Alive population of ringed released birds plus estimate of number of total chicks thought to be alive recorded at 31 st Dec 2015) [74+4]	78
Current Total flock population estimate - MINIMUM (Known Alive population of ringed released birds plus estimate of number of total chicks thought to be alive recorded at 31 st Dec 2016) [67+7]	74
Percentage change in flock population - MAXIMUM	-5.1%
Percentage change in flock population - MINIMUM	-5.1%
Summary: This year has seen a 9% drop in the overall release bird population and a 5% fall in the overall flock population. Breeding productivity was low and the death rate (5 birds) has been higher this year than in any single year of the project so far. The shooting of Swampy in Somerset, and Stanley's collision with a fence at Slimbridge were both entirely unexpected. Further deaths due to disease or associated with assumed poor condition during moult also of concern.	

Graph 1. *South-west crane population 2010 -2016 measured at 31st Dec annually*



Graph 2. *Total flock size annual % change (maximum population estimate)*

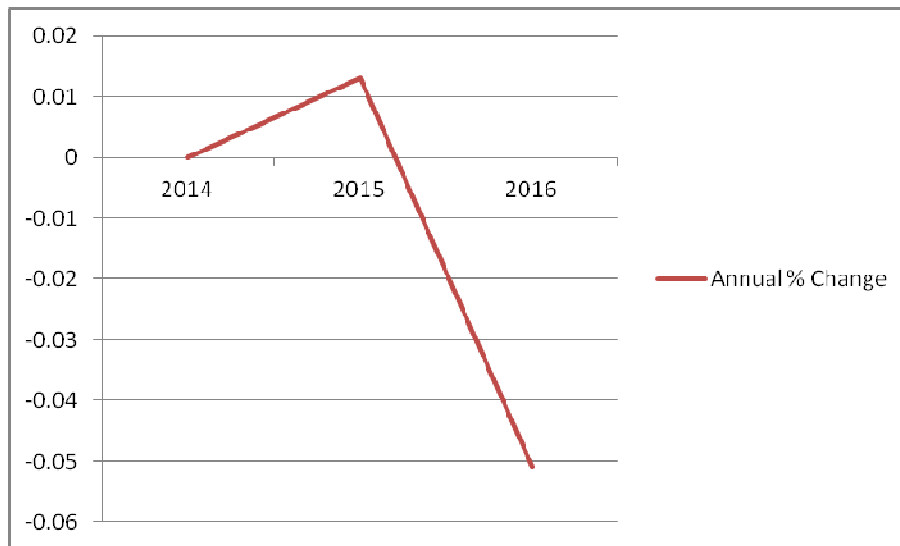


Table 2a. Survival per year group End of previous period (Dec 31st 2015)

Category	2010	2011	2012	2013	2014	TOTAL
Number released	20	17	19	20	17	93
Dead - known cause	1 Jack	1 Gizmo	1 D2	1 Sven	0	4
Dead - unknown cause	1 Howard	0	1 Jess	1 Whgrye	2 Yerebk Humbug	5
Dead - combined	2	1	2	2	2	9
Unknown status - missing < year	1 Gilbert	0	0	0	0	1
Unknown status - missing > year	3 Vince Clarence Mennis	4 Mildred Trinny Charlie Pepper	0	2 Frieden Mistymoor	0	9
Missing - combined	4	4	0	2	0	10
Possibly Alive (Maximum)	15	12	17	16	15	75
Known Alive	14	12	17	16	15	74
% survival per year – known/possible	70-75%	71%	89%	80%	88%	79-81%

Table 2b. Survival per year group. End of current period (Dec 31st 2016)

Category	2010	2011	2012	2013	2014	TOTAL
Number released	20	17	19	20	17	93
Dead - known cause	2 Jack Chris	2 Gizmo Swampy	2 D2 Willow	3 Sven Stanley Buttercup	0	9
Dead - unknown cause	1 Howard	0	1 Jess	1 Whgrye	2 Yerebk Humbug	5
Dead - combined	3	2	3	4	2	14
Unknown status - missing < year	0	0	1 Midnight	0	0	1
Unknown status - missing > year	5 Vince Clarence Mennis Gilbert Minnie	4 Mildred Trinny Charlie Pepper	0	2 Frieden Mistymoor	0	11
Missing - combined	5	4	1	2	0	12
Possibly Alive (Maximum)	12	11	16	14	15	68
Known Alive	12	11	15	14	15	67
% survival per year – known/possible	60%	65%	79-84%	70%	88%	72-73%

1.2 Progress against targets: (from GCP Project 2009-2014)

TARGETS	
1. By 2015, to establish a resident and self-sustaining breeding population of cranes.	2 resident populations – one in Gloucestershire (approx 15 birds) and one in Somerset (approx 53 birds). At a 5yr average of 0.1 chicks per breeding pair, the population is not yet at a self-sustaining level. However, the released population has only been successfully fledging chicks since 2015, and it will be 3 more years (Spring 2019) until all the birds are all at full breeding capacity.
2. By 2025, to achieve a breeding population of at least 20 pairs, plus sufficient juveniles to maintain the population.	21 pairs formed this year, with 15 of these going on to make breeding attempts. It looks likely that the target of 20pairs will be reached. Although the population was maintained in 2015 by the production of 4 fledged chicks, the loss of 6 and gain of only 3 this year, has seen a negative trend in the release population.
3. To achieve a survival rate to adulthood of 50% for the released cranes.	Target achieved. Overall survival rate above this level for all years.

1.3 Resightings

The ringed cranes were monitored monthly through radio tracking and observations by volunteers in Somerset over a five day period at the end/start of each calendar month, coordinated by the project coordinator volunteer. At Slimbridge observations were done on a more casual basis by site staff and sent on down to the coordinator in Somerset to compile.

Monthly column categories

AL = Known to be alive, within the study area (Somerset Levels and Moors)

AE = Known to be alive, outside the study area

DE = Known to be dead

ND = Not Detected (per month)

Summary column

KA = Known alive within or without study area – a positive ID within the last 4 months of the calendar year. (this includes positive ID outside of the resightings period)

?? = Not detected for at least the last 4 months (Sep-Oct-Nov-Dec) but less than a year. Recorded as missing < year in the table above.

DE = Known to be dead

M1 = Missing for more than 12 months

AA = Assumed Alive (for unringed 2nd generation birds that can not be categorically identified only)

Table 3. Resightings - 1st January 2016 to 31st December 2016

No	Name	Combo	m/f	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	STATUS
1	Clarence	BlWhRe	M													M1
2	Gemma	ReWhRe	F	ND	ND	AL	ND	ND	ND	ND	ND	AL	AL	ND	AL	KA
3	Minnie	ReGrRe	M	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	M1
5	Gilbert	YeWhRe	M													M1
6	Michaela	GrBlRe	F	ND	ND	ND	AL	ND	AL	ND	AE	AL	AL	AL	AL	KA
7	Bart	ReBlRe	M	AE	AE	AE	AE	AE	ND	ND	ND	AE	AE	AE	AL	KA
9	Monty	BkGrRe	M	AE	AE	AE	AE	AE	AE	ND	ND	AE	AE	AE	AL	KA
10	Mennis	BlGrRe	M													M1
11	Chris	BkBlRe	F	AE	AE	DE										DE
13	Twinkle	BkYeRe	F	AL	ND	ND	ND	AL	ND	ND	AL	ND	AL	AL	AL	KA
15	Wendy	WhBlRe	F	AE	ND	AE	AE	AE	ND	ND	AE	AE	AE	AE	AE	KA
17	Vince	WhGrRe	F													M1
18	Squidgy	GrYeRe	F	AE	AE	ND	AE	AE	ND	ND	ND	AE	AE	AE	AE	KA
19	Cosmo	GrBkRe	M	ND	ND	AL	AL	ND	ND	ND	ND	AL	AL	ND	AL	KA
21	Ruby	WhBkRe	F	AE	AE	AE	AE	AE	ND	ND	AE	AE	AE	AE	AE	KA
22	Tamsin	ReBkRe	F	ND	AL	AL	AE	ND	ND	AE	ND	AL	ND	AL	AL	KA
23	Regina	ReYeRe	F	ND	AL	AL	AL	AL	AL	ND	AL	AL	AL	AL	AL	KA
25	Sedge	WhYeRe	F	AE	ND	AE	AE	ND	AE	ND	ND	AE	AE	ND	AE	KA
26	Lofty	ReBlWh	M	ND	ND	AL	AE	ND	AE	AE	AE	AE	AL	AL	AL	KA
27	Wally	ReYeWh	M	ND	ND	AL	AL	AL	ND	ND	ND	AL	AL	AL	AL	KA
28	Christmas	BkBlWh	F	ND	ND	AL	ND	ND	ND	ND	ND	AL	ND	AL	AL	KA
29	Timmy	ReBkWh	M	ND	ND	ND	AL	AL	AL	ND	ND	AL	AL	AL	AL	KA
30	Legend	WhReWh	M	AL	AL	AL	AL	AL	AL	ND	ND	ND	AL	AL	AL	KA
31	Albert	WhBlWh	M	AE	AE	ND	AE	AE	ND	ND	AE	AE	AE	AE	AE	KA
32	Charlie	WhYeWh	M													DE
33	Pepper	WhGrWh	M													DE
35	Beatrice	BlReWh	F	ND	AE	ND	ND	ND	ND	ND	ND	ND	ND	ND	AE	KA
37	Swampy	BlYeWh	F	AL	ND	ND	ND	AL	ND	AL	AL	AL	DE			DE
38	Trinny	YeReWh	F													M1
39	Elle	YeBlWh	F	AL	ND	AL	AL	AL	AL	ND	ND	AL	AL	AL	AL	KA
40	Mildred	BkGrWh	F													M1
41	Gerald	YeBkWh	M	AL	AL	AL	ND	AL	AL	ND	AL	AL	AL	ND	AL	KA
44	Flash	GeBkWh	F	AL	AL	AL	ND	AL	ND	ND	AL	AL	AL	AL	AL	KA
45	Pippa	GrReWh	F	AL	ND	AL	ND	ND	ND	ND	ND	ND	ND	ND	AL	KA
47	Phelps	ReYeBl	M	ND	ND	AL	ND	AE	ND	ND	ND	AE	AL	ND	AL	KA
48	Easter	ReGrBl	F	ND	ND	ND	ND	AL	ND	ND	ND	AL	AL	AL	AL	KA

No	Name	Combo	m/f	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	STATUS
49	Gibble	ReBkBl	F	ND	ND	AL	AE	AL	AE	AE	AE	AE	AL	AL	AL	KA
50	Elizabeth	WhReBl	F	ND	ND	AE	AE	AE	ND	ND	ND	AE	AE	AE	ND	KA
52	Chocolo	BkGeBl	M	ND	AL	AL	AE	ND	ND	AE	ND	AL	AL	ND	AL	KA
53	Alexander	WhBkBl	M	AL	ND	ND	ND	AL	AL	AL	AL	AL	AL	ND	AL	KA
54	Midnight	BlReBl	M	ND	ND	AL	ND	ND	ND	ND	ND	ND	ND	ND	ND	??
56	Evie	BlYeBl	F	AE	ND	ND	AE	AE	ND	ND	AE	AE	AE	AE	AE	KA
58	Haribo	BlBkBl	M	AL	ND	ND	ND	AL	ND	ND	AL	AL	AL	AL	AL	KA
60	Wycliffe	YeWhBl	M	ND	ND	AL	ND	AE	ND	ND	ND	AL	AL	AL	AL	KA
61	Willow	YeGrBl	M	AE	ND	AE	AE	AE	ND	ND	ND	DE				DE
62	Wiz	BkYeBl	M	AL	ND	AL	AL	AL	AL	ND	ND	AL	AL	AL	AL	KA
63	Shadow	GrReBl	M	ND	AL	AL	ND	ND	AL	ND	ND	ND	AL	AL	AL	KA
64	Maple	GrWhBl	F	ND	AL	ND	ND	AE	ND	ND	ND	ND	ND	AL	AL	KA
65	D2	GrYeBl	M													DE
66	Margaret	GrBkBl	F	AL	ND	AL	ND	AL	ND	ND	ND	ND	AL	ND	AL	KA
67	Jasper	BkReBl	M	ND	AL	AL	AL	AL	AL	ND	AL	AL	AL	AL	AL	KA
68	Jess	YeBkBl	F													DE
69	Pickles	BkWhBl	M	AL	ND	AL	AL	U	AL	ND	AL	AL	AL	ND	AL	KA
70	Cherry	ReWhYe	F	ND	AL	ND	ND	AL	AL	ND	ND	AL	AL	AL	AL	KA
71	Cotton	ReBlYe	F	AE	ND	AE	AE	AE	ND	ND	AE	AE	AL	AE	AL	KA
72	Waterwing	ReGrYe	F	AL	AL	AL	AL	U	AL	ND	AL	AL	AL	AL	AL	KA
74	Acorn	WhReYe	F	AL	AL	AL	ND	U	AL	ND	AL	AL	AL	AL	AL	KA
76	Wh-gr-ye	WhGrYe	M													DE
77	Billy	WhBkYe	M	AL	AL	ND	AE	AE	ND	ND	ND	AE	ND	ND	ND	KA
79	Excalibird	BlWhYe	F	AL	AL	AL	AL	AL	ND	ND	ND	AL	AL	AL	AL	KA
80	Viridor	BlReYe	F	AL	AL	AL	AE	AL	AL	ND	ND	AL	AL	AL	AL	KA
81	Bop-Bop	BlBkYe	F	AL	AL	ND	AE	AL	AL	ND	ND	AL	AL	AL	AL	KA
82	Skye	YeReYe	F	ND	AL	AE	AE	ND	ND	ND	ND	ND	ND	ND	AL	KA
83	Stowford	YeWhYe	M	AL	AL	AL	AE	ND	ND	ND	ND	AL	ND	ND	AL	KA
84	Sven	YeBlYe	M													DE
85	Stanley	YeGrYe	M	AL	AL	AE	DE									DE
86	Bombus	YeBkYe	M	ND	ND	ND	AE	ND	AL	ND	ND	AE	AE	AL	AE	KA
87	Manfred	GrReYe	M	ND	AL	AL	AL	AL	ND	ND	AL	AL	AL	AL	AL	KA
88	Buttercup	GrWhYe	F	AE	AE	AE	AE	AE	ND	ND	ND	AL	DE			DE
89	Cookie	GrBkYe	F	AE	AE	AE	AE	AE	AL	ND	ND	AE	AE	ND	AE	KA
90	Frieden	BkReYe	F													M1
91	Oakie	BkWhYe	M	AE	ND	AE	AE	AE	ND	ND	AE	AE	AE	AE	AL	KA

No	Name	Combo	m/f	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	STATUS
93	Mistymoor	BkGrYe	M													M1
94	Chip	ReWhBk	F	AL	AL	AL	AL	ND	ND	ND	AL	AL	AL	ND	AL	KA
95	Pecky	ReBlBk	M	AL	AL	AL	ND	ND	ND	ND	ND	AL	AL	AL	AL	KA
96	Soar	ReYeBk	M	AL	AL	AL	AL	AL	AL	ND	AL	AL	AL	AL	AL	KA
97	Ted	BkYeBk	M	AL	ND	ND	AL	ND	ND	ND	AL	AL	ND	AL	AL	KA
98	Patience	WhReBk	F	AL	AL	AL	AL	AL	AL	ND	AL	AL	ND	AL	AL	KA
100	Century	WhYeBk	F	AL	AL	AL	AL	AL	ND	ND	AL	AL	AL	ND	ND	KA
102	Dillon	BlReBk	M	AL	AL	A	AL	ND	ND	ND	AL	ND	ND	AL	ND	KA
103	Rosa	BlWhBk	F	AL	AL	AL	AL	AL	AL	ND	AL	AL	AL	AL	AL	KA
104	Sherbert	BlYeBk	F	AL	AL	AL	AL	AL	AL	ND	AL	AL	AL	AL	AL	KA
105	Kia	WhBlBk	F	AL	AL	AL	AE	AL	AL	ND	AL	AL	AL	AL	AL	KA
106	Ye-re-bk	YeReBk	M													DE
107	Diamond	YeWhBk	F	AL	AL	AL	AE	AL	AL	ND	ND	AL	AL	AL	AL	KA
108	Gary	YeBlBk	M	AL	ND	AL	ND	ND	AL	ND	ND	AL	AL	AL	AL	KA
109	Cleg	BkGrBk	M	AL	AL	AL	AL	AL	ND	ND	AL	AL	AL	AL	AL	KA
110	Pepé	GrReBk	M	AL	ND	AL	AE	ND	AL	ND	AL	AL	AL	ND	AL	KA
113	Ziggy	BkReBk	F	AL	ND	AL	AL	AL	ND	ND	AL	AL	AL	AL	AL	KA
114	Humbug	BkWhBk	F													DE
201	A&S Chick	Unringed 2015	U	AL	ND	ND	AL	ND	ND	ND	ND	ND	ND	ND	AL	AA
202	A&S Chick	Unringed 2015	U	AL	ND	ND	AL	ND	ND	ND	ND	ND	ND	ND	AL	AA
203	M&W Chick	Unringed 2015	U	AE	ND	AE	AE	AE	ND	ND	AE	AE	AE	AE	AE	KA
204	M&G Chick	Unringed 2015	U	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	AL	AA
205	M&G chick	Unringed 2016	U									AL	AL	AL	AL	KA
206	L&G Chick	Unringed 2016	U								AE	AE	AL	AL	AL	KA
207	A&S Chick	ReWhGr 2016	F								AL	AL	AL	AL	AL	KA

1.4 Breeding Summary 2016

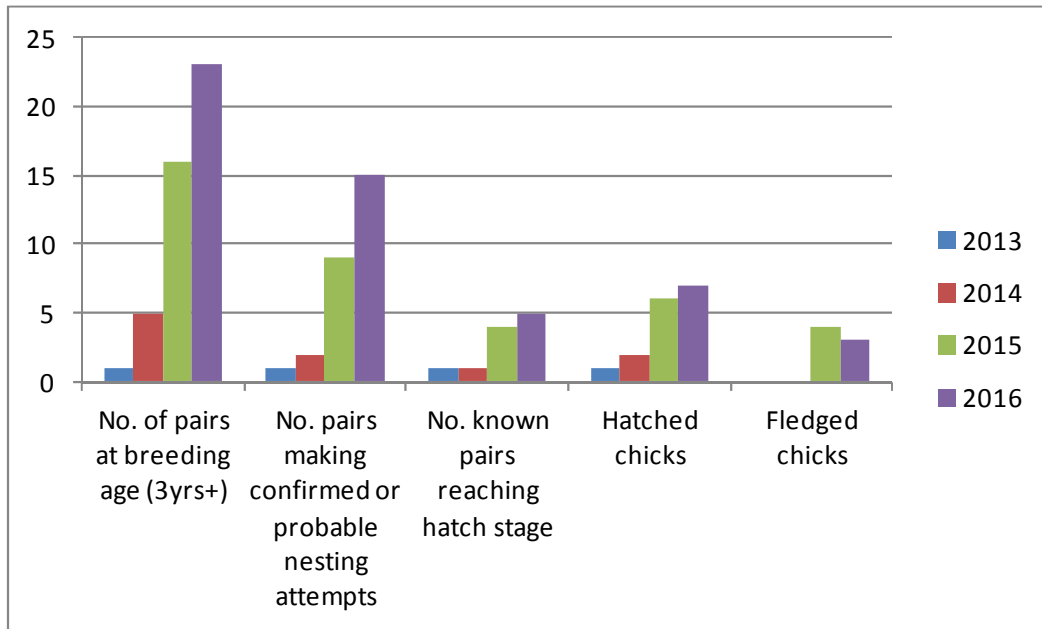
A significant increase in number of potential breeding pairs from 17 in 2015 to 25 in 2016 resulted in an increase in number of territorial pairs from 16 in 2015 to 22 in 2016. However, of these 22 pairs, 15 (68%) went on to make breeding attempts, compared to only 9 of the 16 pairs (56%) in 2015, with 60% of potential pairs making breeding attempts – the highest figure to date, and probably a reflection of the pairs getting older and more established. The 15 pairs that nested made a total of 25 nesting attempts (compared with 11 nesting attempts from 9 pairs in 2015).

A poor productivity was recorded this year, with only 5 of these 25 attempts ending in successful hatching, and 3 chicks fledging from 3 pairs. This gives an overall productivity figure of 0.20 per confirmed/probable breeding pair (or 0.14 per territorial pair). This is significantly lower than the productivity of the non-reintroduced population that this year was 0.40 per territorial pair.

Table 4. Summary of breeding attempts 2013-2016

	2013	2014	2015	2016	2017
No. potential pairs at breeding age (3yrs+)	7	13	17	25	32
No. of pairs at breeding age (3yrs+)	1	5	16	23	
Territorial pairs	1	5	16	22	
% of potential pairs that formed pairs	14%	38%	94%	96%	
No. pairs making confirmed nesting attempts	1	2	7	15	
No. pairs making probable nesting attempts	0	0	2	0	
% of potential pairs that made nesting attempts	14%	15%	53%	60%	
% of territorial pairs that made nesting attempts	100%	40%	56%	68%	
Confirmed nesting attempts - including re-lays	2	4	11	25	
max/min no. eggs laid from confirmed attempts	2-4	6-8	15-22	35-48	
No. known pairs reaching hatch stage	1	1	4	5	
% of confirmed and probable nesting attempt reaching hatch stage	100%	50%	44%	33%	
Hatched chicks	1	2	6-7	7	
No. of hatched chicks per pair making confirmed/probable nesting attempts	1	1	0.72	0.46	
Fledged chicks	0	0	4	3	
No. of fledged chicks per pair making confirmed/probable nesting attempts	0	0	0.44	0.20	
No. of fledged chicks per total territorial pairs	0	0	0.25	0.14	

Graph 3. Year on year comparison of No. pairs, breeding attempts and outcomes 2013-2016



Graph 4. No. pairs, breeding attempts and outcomes 2013-2016

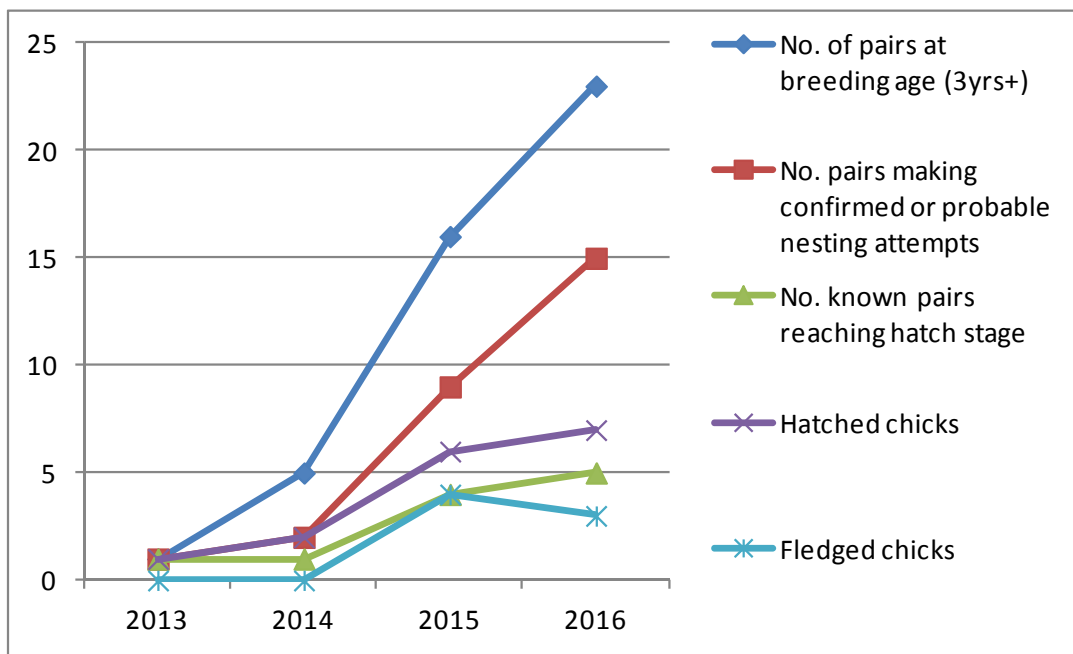


Table 5. Summary of breeding categories by age group

Age category / Breeding category	2010 (6yr olds)	2011 (5yr olds)	2012 (4yr olds)	2013 (3yr olds)	2014 (2yr olds)	Totals
No. birds	12 (100%)	12 (100%)	17 (100%)	15 (100%)	15 (100%)	71 (100%)
No. conf/prob (%)	10 (83%)	10 (83%)	9 (53%)	0 (0%)	0 (0%)	29 (41%)
No. possible (%)	2 (17%)	1 (8.5%)	4 (23.5%)	7 (47%)	0 (0%)	14 (20%)
No. unpaired (%)	0 (0%)	1 (8.5%)	4 (23.5%)	8 (53%)	15 (100%)	28 (39%)

This table shows that at 5yrs old, the cranes would appear to be reaching the maximum % making confirmed/probable breeding attempts, with no 6 year old birds remaining unpaired.

No confirmed/probable breeding attempts were made at all by 2013 (3yr old) and 2014 (2yr old) birds, with about half of the 2013 birds paired up and territorial, but none of the 2yr olds in this category, all remaining unpaired.

The table predicts a year on year increase in the number of birds within the confirmed/probable breeding categories. 2017 should see around 13 additional birds (equating to 6 -7pairs) move into this category.

1.6 Birds lost and missing

Losses this year

Black Blue Red (2010 female) CHRIS

Chris was caught and euthanased at WWT Slimbridge in mid February 2016, following recurring periods of ill health. Final histopathology results confirmed that she was suffering from avian tuberculosis.

Yellow Green Yellow (2013 male) STANLEY

Stanley was found dead, having flown into a barbed wire fence on the WWT Slimbridge reserve on the last day of February 2016. He had numerous wounds on his legs and also around the head and neck. The left femur was dislocated from the pelvic girdle. Stanley was in excellent condition and weighed 4780gms, there was no evidence of any disease conditions and apart from a very small number of tiny nematode parasites in the small intestine everything was normal.

Green White Yellow (2013 female) BUTTERCUP

Buttercup's legs and colour rings were found by the reserve team at WW Slimbridge on 22nd September 2016. Buttercup was last seen 12/07/2016 and was caught that day, in moult at WWT Slimbridge. She was alert and not especially weak in hand, but exceptionally under-weight (less than 3 kg) with mediocre feather condition. Blood & faecal samples were taken, and she was treated with antibiotic, wormer and anti-coccidial drugs, and released. Blood results showed changes indicative of an infectious disease process (unknown, possibly avian TB), and the faecal was negative for coccidia and worms. It is thought that she probably died of disease.

Yellow Green Blue (2012 male) WILLOW

Willow was caught and fitted with an Ecotone leg-mounted GPS tag in June 2016 on the WWT Slimbridge reserve. The tag abruptly stopped working on 15/07 and the bird was not seen again since. Willow was presumed predated, possibly whilst still in moult or just on leaving moult.

Blue Yellow White (2011 female) SWAMPY

Swampy's remains were handed into the project by a local farmer near Ilchester, Somerset, following the bird's dead remains going through his maize harvesting machinery. Suspicions were aroused as the cause of her death, and the remains were sent for post mortem. Results found embedded shot, and vets reported cause of death was shooting. Police investigation has resulted in no further information so far. Swampy was the project's best female - having produced 2 chicks to fledge in 2015, and 1 in 2016 and is a significant loss to the project.

Missing this year

Blue Red Blue (2012 male) MIDNIGHT

Midnight bred this year in Wiltshire, but when Gemma and the chick appeared in Somerset in early Autumn, Midnight was not present. It is thought that he probably died during or following moult in Wiltshire – but is currently recorded as missing.

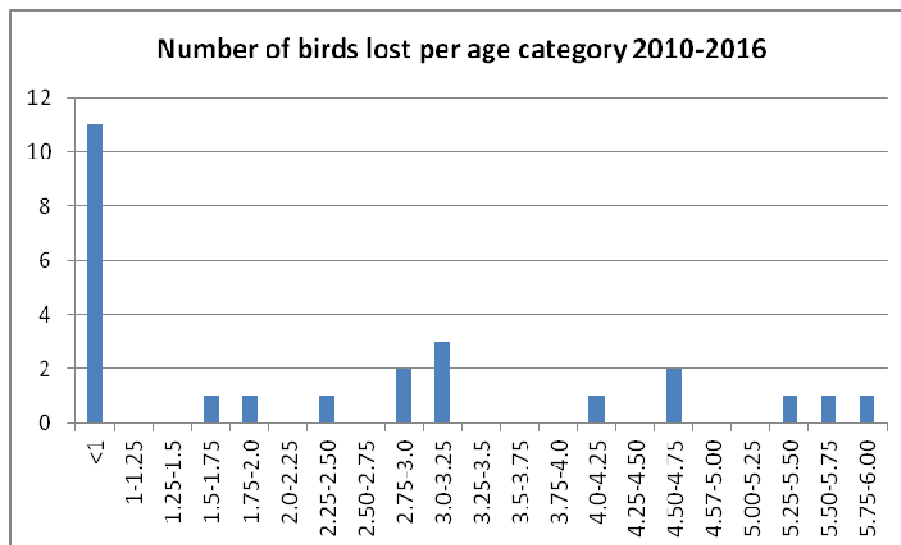
Table 7. *Lost and missing birds from release to date*

DATE OF EVENT	AGE OF BIRD AT TIME OF EVENT	DESCRIPTION	BIRD IDENTIFICATION / NAME
06/11/2010	6mths 1 wk	Missing, remains found Jan 2011, unknown cause of death	Yellow Blue Red Howard
18/11/2010	6 mths 3 wks	Flew into wires, Stathe	Yellow Black Red Jack
06/09/2011	4 mths 4 days	Flew to Kent – never seen again to date.	Black Green Red Mildred
10/12/2011	7 mths 3 days	Taken by fox following illness – remains found partly buried	Green Yellow White Gizmo
31/03/2013	10 mths 2 wks	Likely cause of death - taken by fox following broken leg	Green Yellow Blue D2
06/04/2013	23 mths	Went missing, unknown status	Yellow Red White Trinny
10/05/2013	36 mths 1wk	Missing – possibly pre or during moult, unknown status	White Green Red Vince
31/07/2013	38mths 1 wk	Missing post moult, unknown status	Blue White Red Clarence
23/10/2013	29 mths	Went missing, unknown status	White Yellow White Charlie
01/11/2013	5 mths and 3 wks	Found dead on West Sedgemoor Unknown cause of death	White Green Yellow White Green Yellow

11/11/2013	18 mths 1 wk	Found dead on Aller Moor Unknown cause of death	Yellow Black Blue Jess
20/12/2013	7 mths 4 days	Found dead on West Sedgemoor. Unknown cause of death	Black Red Yellow Frieden
27/01/2014	33 mths	Went missing, unknown status	White Green White Pepper
08/03/2014	9 mths 3 wks	Collision injury, broken wing, euthanased	Yellow Blue Yellow Sven
01/05/2014 (approx)	11 mths 1 wk	Went missing, unknown status	Black Green Yellow Mistymoor
24/10/2014	5 mths 3 wks	Died following leg or other injury. Cause of death or injury unknown	Yellow Red Black Yellow Red Black
03/11/2014	5 mths 3 wks	Died – suspected predation, following leg injury and deterioration	Black White Black Humbug
15/11/2014 (approx)	4yrs 6mths 2 wks	Went missing in 2015 - unknown status	Blue Green Red Mennis
05/01/2015 (approx)	4 yrs 8mths 3 wks	Missing for over a year, unknown status following long-term leg injury and deterioration in condition	Yellow White Red Gilbert
October '15	5yrs 6mths	Missing since late 2015 - unknown status	RedGreenRed Minnie
16/02/16	5yrs 9mths	Euthanased after a period of ill health. Post mortem confirmed avian TB	BlackBlueRed Chris

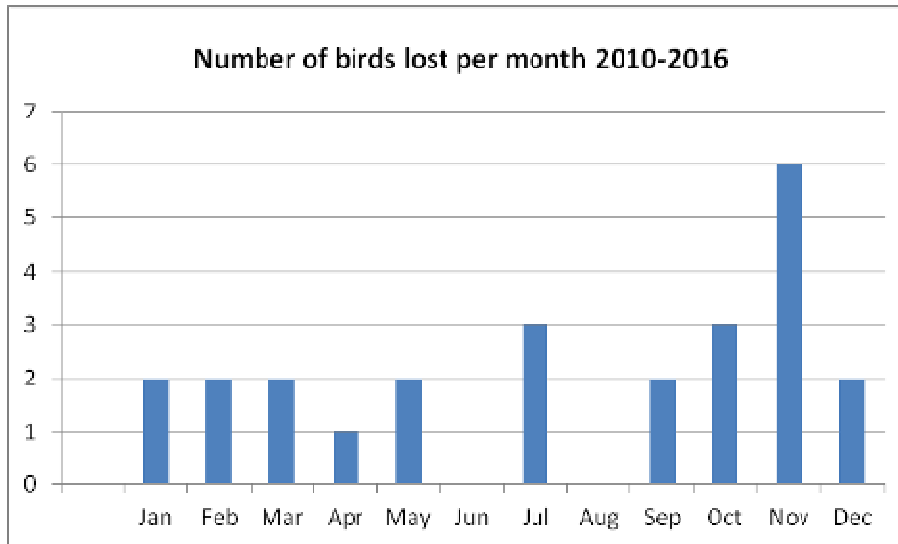
29/02/16	2yrs 9mths 2wks	Found dead having flow into barbed wire – Slimbridge	YellowGreenYellow Stanley
12/07/16	3yrs 1mth 3wks	Probably died of disease following moult at Slimbridge	GreenWhiteYellow Buttercup
15/07/16	4yrs 2mths 2wks	Possible predation following moult at Slimbridge.	YellowGreenBlue Willow
28/09/16	5yrs 5mths	Found shot on land Near Ilchester . Police investigation has resulted in in no further information so far.	BlueYellowWhite Swampy

Graph 5 - Age at which birds have died/ gone missing



Of the 25 birds that have died/gone missing following release, 11 (44%) were in the first few months following their release during their first winter. This is clearly a period of high-risk time for the cranes. There also appears to be a second peak in the early to late Spring of their 3rd year – perhaps indicative of birds being lost their first moult – or as they stray further afield. This also possibly reflected in the number of birds the appear to have been lost during the month of July.

Graph 6. *Months of year in which birds have died/gone missing*



1.7 Ringed this year

Three juvenile cranes were hatched during the 2016 season. The juvenile hatched in Somerset to Alexander (WhBkBl, 2012) and Swampy (BIYeWh, 2011 – now deceased) was ringed on 26th August at 06.00 with the colour combination ReWhGr. At the same time a radio tag was fitted. This tag is still functioning. Feathers which had fallen naturally during the procedure were sent for gender testing and established the bird to be a female. No other biometric testing was done.

1.8 Table of created breeding sites under the Viridor funded period and use

Created zone location	Year created	Use-able in Spring?	If not use-able, why?	Used?
Hatch pen-field West Sedgemoor (RSPB)	2009	Y	The area was not used by territorial pairs of cranes – which seem to favour fields to the West. Possible conflict with Otters which are known to live in this area?	N
Greylake f9 &10 (RSPB)	2011	N	Vegetation height and water levels good, but too disturbed through reserve operations? Field 1 used as regular roost this year during the summer for a pair or possibly a group of cranes.	N
Aller Moor (Hectors)	2012	Y	Reed growth, planted in 2013/2014 is now well established but the area was not used by any pairs of cranes during the Spring of 2016	N
Walton Moor (Clarks)	2013	Y	Water levels good during the spring, and largely undisturbed. A pair of cranes set up territory in the area , were seen to mate and frequently display but didn't nest this year. Vegetation growth around the pool area itself is possibly still too sparse.	Y
Northmoor/Aller (Mitchells)	2013	Y	Used as a roost by cranes during Feb/March 2015 and a young pair were seen using the area to roost during the Spring. The pool area itself is still rather 'open'– not enough cover. Typha and reed is starting to colonize.	Y
Cossington Moor (Stradlings)	2013	Y	Water levels good, disturbance levels thought to be low. Cranes not yet discovered the site.	N
Hambridge West Sedgemoor (RSPB)	2014	N	Very open and bare – not enough cover but getting established. Gate and mesh to be installed in summer 2017.	N
Broadway West Sedgemoor (RSPB)	2014	Y	Area within the territory of nesting pair – but not used as a nesting area. Unknown as to why – perhaps used regularly by otter? Area was completely undisturbed.	N
Moorlinch (NE/Coombes)	2015	N	Still getting established. No sign of being used yet.	N
Kings Sedgemoor (NE/Williams)	2015	N	Still getting established. A pair of birds were recorded there by the farmers on a couple of occasions during the summer	N

1.9 Recommendations for 2017

- Review and increase the efficacy of predator management where possible on the Somerset Levels and Moors.
- Seek to establish the cause of predation through use of hidden cameras and other technology.
- Seek to prevent birds in the WWT Slimbridge area from regularly using areas where they put at increased risk of contracting disease.
- Establish breeding productivity targets.
- Continue the ringing programme for any chicks produced through the project.

2.0 Individual bird summary table for all 93 released birds

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
2010 release year										
1	Clarence	M	GPS, RT	GPS data logger malfunction – ceased to work Sept 2010 Radio tag ceased summer 2011. Thought to be still wearing back pack when missing August 2013.	bl-wh-re	Went missing August 2013. No further sightings.	-	-	?	Missing Aug 2013
2	Gemma	F	RT	Radio tag ceased to function summer 2011.	re-wh-re	Assumed paired with Midnight (2012 male) and first seen in Wiltshire in March by private landowner. Reported definitely incubating in May – eggs laid probably in April. Gemma observed with chick off North Drove, W Sedgemoor, Somerset on 31 st August. No sign of Midnight.	C: 1 chick fledged, Wiltshire.	2015: 1 fledged chick 2016: 1 fledged chick		
3	Minnie	M	GPS, RT	GPS data logger malfunction – ceased to work Sept 2010 Radio tag working poorly March 2012. Still wearing back pack in March 2014. Thought to be still wearing Back Pack when missing in November 2015	re-gr-re	No sightings all year – presumed dead	-	2015: 1 fledged chick 1 chick died pre-fledge DIED 2015	?	Missing Nov 2015
5	Gilbert	M	GPS, RT	GSP data logger malfunction – ceased to work Sept 2010 Radio tag ceased summer 2011. Back pack absent - Sep 2013.	ye-wh-re	Went missing from early January 2015 following severe leg injury (probable break).	-	2014: 2 eggs - failed at egg stage	?	Missing Jan 2015

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
6	Michaela	F	RT	PTT removed Feb 2011 after problem with gait	gr-bl-re	Paired with Timmy-Clef (2011 male) in February on West Sedgemoor. 1st clutch laid 19th March but failed after 5 days – presumed predation. 2 nd attempt in early April went full term but presumed predation took place at/around hatching.	C: 2 breeding attempts - both ended in failure at egg stage	2014: 1 clutch - failed at egg stage 2015: 3 clutches: 2 clutches failed at egg stage; 1 chick from last clutch failed to fledge 2016: 2 clutches both failed at egg stage		
7	Bart	M	PTT	PTT ceased Dec 2012 and then intermittent in March 2013. Stopped fully by June 2013.	re-bl-re	Remained at WWT Slimbridge throughout the year and made two breeding attempts with Ruby (2010 female), partner of at least 3 years. Both attempts failed.	C: 2 breeding attempts, both ended in failure at egg stage.	2014: 1 clutch, failed at egg stage 2015: 1 clutch, failed at egg stage 2016: 2 clutches – both failed at egg stage		
8	Jack	F	RT	Radio tag functioning when died	ye-bk-re	Died November 2010 (flew into wires)	-	-	18/11 2010	
9	Monty	M	RT	Radio tag ceased to function summer 2011.	bk-gr-re	Remained at WWT Slimbridge for the whole year. Paired with Sedge (2010 female). 1 st attempt with 1 egg at the end of April. Failed after 1 day. A 2 nd attempt was made in early May with 2 eggs. One was infertile the other hatched on 2 nd June and was reared for 14 days before dying of liver and lung disease.	C: 2 breeding attempts this year, Single chick produced from 2 nd clutch which died.	2013: 1 chick died at 1-2 days. 2014: 2 chicks, both failed to fledge. 2015: 0 2016: 2 clutches: 1 (single egg) was abandoned, 2 egg clutch hatched 1 chick, which died after 14 days. (other egg was infertile)		
10	Mennis	M	GPS, RT	Radio tag ceased summer 2011. Still wearing backpack March 2014.	bl-gr-re	Missing all year. Unknown whereabouts - last seen in November 2014	-	2014: Paired with Swampy- no known attempt MISSING NOV 2014		Missing (presumed dead) November

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
										2014
11	Chris	F	GPS, RT, ECO	Radio tag working poorly March 2012. Capture July 2012 at Slimbridge. Re-fitted with GPS data logger and radio tag. GPS data logger failed Jan 2013. Radio tag failed by summer 2014. Radio tag removed on recapture in August 2014, along with back pack. ECOTONE GPS tag fitted at recapture in August 2015	bk-bl-re	Made no breeding attempts this year due to ill health. Eventually euthanased . PM diagnosed Avian TB	N/A	2013: 1 chick died at 1-2 days. 2014: 2 chicks, both failed to fledge. 2015: no attempt 2016: EUTHANASED	16/02 2016	
13	Twinkle	F	PTT	PTT ceased to function 19 th October 2011 Causing gait problem/irritation to leg winter 2012/13 and Spring/Summer 2013. Intermittent gait problems in 2015.	bk-ye-re	Paired with Haribo (2012 male) again this year on Westmoor, Somerset. 1 st attempt started on 12th April but failed after 12 days due to presumed corvid predation. No further attempts were made.	C: 1 breeding attempt, failed at egg stage	2016: 1 clutch, failed at egg stage		
15	Wendy	F	RT	Radio tag ceased to function summer 2011	wh-bl-re	Remained at WWT Slimbridge and paired with Albert (2011 male). Attempt failed after a few days. No further attempts made.	C: 1 breeding attempt, failed at egg stage.	2015: 1 fledged chick, 1 chick died pre-fledge 2016: 1 clutch, failed at egg stage		
16	Howard	F	RT	Radio tag signal enabled rings to be found Jan 2011	ye-bl-re	Died November 2010. Remains found - cause unknown.	-	-	05/11 2010	

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
17	Vince	F	RT	Radio tag ceased to function summer 2011	wh-gr-re	Went missing May 2013 – no further sightings	-	-	?	Missing May 2013
18	Squidgy	F	RT	Radio tag ceased to function summer 2011	gr-ye-re	Paired with Billy and set up territory at WWT Slimbridge. Prospected for nest site, but no breeding attempt made.	P: Paired and territorial, but no breeding attempt made this year	None		
19	Cosmo	M	RT	Radio tag ceased to function summer 2011	gr-bk-re	Paired with Pippa (2011 female) again this year and set up territory on Wetmoor, Somerset. Attempt failed after 6 days due to possible corvid predation. No further attempts known but the pair were not seen again during the summer. Cosmo reappeared in the autumn.	C: 1 breeding attempt which ended in failure at egg stage	2015: Probable breeding attempt, failed at egg stage. 2016: 1 clutch, failed at egg stage		
21	Ruby	F	PTT	PTT ceased Dec 2012 but intermittent in early Spring 2013. PTT removed when caught at moult, July 2013. Original radio tag ceased to function summer 2011. New radio tag fitted in July 2013, still working March 2014. Not checked during 2015 or 2016 so radio tag status unknown.	wh-bk-re	Remained at WWT Slimbridge throughout the year and made two breeding attempts with Bart (2010 male) partner of at least 3 years. Began incubation on 29 th April on Southlake using a former Oystercatcher nest which they abandoned after 4 days. 2 nd attempt in the same area also failed.	C: 2 breeding attempts, both failed at egg stage.	2014: 1 clutch, failed at egg stage 2015: 1 clutch, failed at egg stage 2016: 2 clutches, both failed at egg stage		
22	Tamsin	F	RT	Radio tag ceased to function summer 2011.	re-bk-re	Paired with Choccolo (2012 male) on West Sedgemoor in January, then at WWT Slimbridge and back in Somerset in April. Eventually they were identified west of Cardiff in South Wales. It is not known whether a	P: Unknown - but no chicks present – so failed.	2015: Unknown – but failed to fledge 2016: Unknown but failed to fledge		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
						breeding attempt was made but later were observed without chicks				
23	Regina	F	RT	Radio tag ceased to function summer 2011.	re-ye-re	Paired with Jasper (2012 male) and set up territory on West Sedgemoor, in February. Incubation of 2 eggs started on 28 th May but failed due to predation by unknown predator.	C: 1 attempt which failed at egg stage	2016: 1 clutch, failed at egg stage		
25	Sedge	F	PTT	PTT stopped working in Dec 2012 , and was intermittent through Spring 2013, stopping working fully by mid June 2013.	wh-ye-re	Remained at Slimbridge for the whole year. Paired with Monty (2010 male). 1 st attempt with 1 egg at the end of April. Failed after 1 day. A 2 nd attempt was made in early May with 2 eggs. One was infertile the other hatched on 2 nd June and was reared for 14 days before dying of liver and lung disease.	C: 2 breeding attempts. 1 chick hatched from 2 nd clutch but later died	2016: 1 chick from 2 nd clutch, failed to fledge		
2011 release year										
28	Christmas Shoes	F	RT	Radio tag ceased to function summer 2013.	bk-bl-wh	No breeding attempts observed this year but in July was seen with Shadow showing possible pair behaviour in preparation for 2017	N: No breeding attempt this year	None		
26	Lofty	M	GPS, RT	GPS data logger failed Sept 2012. Radio tag ceased to work winter 2012/13. Still wearing back pack, November 2015 . Appears to be wearing back pack in photos from Summer 2016 but no further information on back pack status during autumn/winter 2016	re-bl-wh	Paired with Gobble early in the year in Somerset. Seen at WWT Slimbridge in March and then not seen again. Both observed eventually on private land near Newport , South Wales. Incubation of 2 eggs commenced on 21 st April. Both eggs hatched and one chick reared to fledging. The pair returned to Somerset with their chick in September.	C: 1 breeding attempt 2 eggs hatched 1 chick survived to fledging	2015: Unknown but failed to fledge 2016: 2 chicks hatched, 1 chick fledged		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
27	Wally	M	GPS, RT	GPS data logger failed Sept 2012 Radio tag ceased to work winter 2012/13. Still wearing back pack, November 2015. No further information on back pack status during 2016	re-ye-wh	Paired with Easter Beans (2012 female) and reported seen near Templecombe. Subsequently seen with non-breeding birds on West Sedgemoor. No evidence of any breeding attempts.	P: No breeding attempt this year	None		
32	Charlie	M	GPS, RT	GPS data logger failed Sept 2012 Radio tag ceased to work winter 2012/13. Still wearing back in Sep 2013 when went missing – Oct 2013.	wh-ye-wh	Went missing – October 2013. No further sightings.	-	-		Missing Oct 2013
31	Albert	M	RT	GPS data logger failed Sept 2012, Radio tag ceased to function summer 2013. Back pack fallen off - Sept 2013.	wh-bl-wh	Remained at WWT Slimbridge and paired with Wendy (2010 female). A breeding attempt failed after a few days. No further attempts made.	C: 1 breeding attempt this year, failed at egg stage	2016: 1 clutch, failed at egg stage		
33	Pepper	M	RT	Radio tag ceased to function summer 2013.	wh-gr-wh	Went missing – January 2014. No further sightings.	-	-		Missing Jan 2014
29	Timmy	M	RT	Radio tag ceased to function summer 2013.	re-bk-wh	Paired with Michaela (2010 female) in February on West Sedgemoor. 1st clutch laid 19th March but failed after 5 days – presumed predation. 2nd attempt in early April went full term but presumed predation took place at hatching.	C: Two breeding attempts which ended in failure at egg stage	2015: 2 clutches: 1 failed to hatch; 1 chick from 2nd clutch failed to fledge. 2016: 2 clutches – both failed at egg stage		
30	Legend	M	RT	Radio tag last working in March 2016, now failed.	wh-re-wh	Paired up with Elle (2011 female) in early part of year and set up territory on West Sedgemoor. 1st attempt incubation started on 4th April but	C: 3 breeding attempts, all failed at egg stage.	2015: 2 clutches, both failed at egg stage 2016: 3 clutches all		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
						predated after 2 days – predator unknown. 2 nd attempt incubation started in May but predated (possible otter) after 8 days. 3 rd attempt predated (possible otter) after 14 days.		failed at egg stage		
39	Elle	F	GPS, RT	GPS data logger failed Sept 2012 Radio tag still working (just) in December 2016. (incredibly!) Back pack shifted and in odd position first noted in Feb/March 2015. Still wearing back-pack in odd position – December 2016	ye-bl-wh	Paired up with Legend (2011 male) in the early part of the year and set up territory on West Sedgemoor. 1 st attempt incubation started on 4 th April but predated after 2 days – predator unknown. 2 nd attempt incubation started in May but predated (possible otter) after 8 days. 3 rd attempt predated (possible otter) after 14 days.	C: 3 breeding attempts, all failed at egg stage.	2015: 2 clutches, both failed at egg stage 2016: 3 clutches all failed at egg stage		
35	Beatrice	F	GPS, RT	GPS data logger failed Sept 2012 Radio tag ceased to function summer 2013. Still wearing back pack when photographed in October 2015. No further information at December 2016	bl-re-wh	Remained at the Ouse Washes area with her unringed mate (presumably the same bird as last year). Made 3 attempts at breeding which failed. 1 st due to flooding; 2 nd due to predation; 3 rd due to reasons unknown. Neither was seen again until November 2016 when they were seen with a group of unringed cranes in Cambridgeshire.	C: 3 breeding attempts, failed at egg stage	2016: 3 clutches, all failed at egg stage		
41	Gerald	M	GPS, RT	GPS data logger failed Sept 2012 Radio tag ceased to work winter 2012/13. Still wearing back pack when sighted in January 2015. Still wearing back pack November 2015 No further information at December 2016	ye-bk-wh	Paired with Flash (2011 female and his sibling) as last year. Set up territory at Black Pit, West Sedgemoor. 1 st attempt eggs laid on 19 th April but failed after 16-19 days due to predation by otter or corvid (crow roosting tree nearby). 2 nd attempt in the same area failed at 30 days due to unknown predator.	C: 2 breeding attempts, both failed at egg stage	2015: Suspected nesting attempt – no chicks fledged. 2016: 2 clutches, both failed at egg stage		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
44	Flash	F	RT	Radio tag ceased to function summer 2013.	gr-bk-wh	Paired with Gerald (2011 male and her sibling) . Set up a territory on West Sedgemoor (Same area as 2015) 1 st attempt eggs laid on 19th April but failed after 16-19 days due to predation by otter or corvid (crow nest in tree nearby). 2 nd attempt in the same area failed at 30 days due to unknown predator.	C: 2 breeding attempts, both failed at egg stage	2015: Suspected nesting attempt – no chicks fledged. 2016: 2 clutches, both failed at egg stage		
43	Gizmo	M	RT	Taken by fox in Dec. Radio tag enabled body to be located.	gr-ye-wh	Taken by fox December 2011, following illness.	-	-	10/12 2011	
40	Mildred	F	RT	Out of study area - Radio tag unknown.	bk-gr-wh	Went missing September 2011 after sighting in Kent. No further sightings.	-	-	-	Missing Sept 2011
38	Trinny	F	GPS, RT	GPS data logger failed Sept 2012 Radio tag ceased to work winter 2012/13. Thought to have still been wearing back pack when went missing April 2013.	ye-re-wh	Went missing April 2013. No further sightings.	-	-	-	Missing April 2013
37	Swampy	F	RT	Radio tag fell off May 16 th 2012 and located on Aller Moor by signal.	bl-ye-wh	Paired with Alexander (2012 male) as last year and set up territory on private land on Kingsmoor in early April. 1 st attempt failed due to a cause unknown. 2 nd attempt in a rye grass field on private land at the end of April also failed after 12 days – cause unknown. 3 rd attempt in the same area in late May went full term. 1 egg	C: 3 breeding attempts. 2 failed at egg stage, with the 3 rd producing 1 fledged chick.	2015: 2 chicks to fledging 2016: 1 chick fledged and ringed	28/09 2016	

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
						hatched, fledged and returned to West Somerset. On 28 th September 2016 Swampy was found shot.				
45	Pippa	F	RT	Radio tag ceased to function summer 2013.	gr-re-wh	Pippa was seen paired with Cosmo (2010 male) again this year and set up territory on Wetmoor, Somerset. Breeding attempt failed after 6 days due to possible corvid predation. No further attempts known but the pair were not seen again during the summer. Pippa was finally re-sighted in December 2016 after 8 months 'off the radar'.	C: 1 breeding attempt Failed due to predation	2015: Probable breeding attempt, failed to hatch eggs 2016: 1 clutch failed at egg stage		
2012 release year										
47	Phelps	M	GPS, RT	Back-pack partly fell off and was removed by hand autumn 2012 Radio tag ceased to function Nov 2014.	re-ye-bl	Paired with Elizabeth (2012 female) at WWT Slimbridge as last year. 1st attempt incubation start date unknown but failed on 7/8 May cause unknown. 2 nd attempt in the same area was abandoned after 24 days	C: 2 breeding attempts made this year both failed at egg stage	2016: 2 clutches, both failed at egg stage		
48	Easter Beans	F	RT	Radio tag ceased to function Oct 2013.	re-gr-bl	Paired with Wally (2011 male) and reported seen near Templecombe in Spring. Subsequently seen with non-breeding birds on West Sedgemoor. No evidence of any breeding attempts.	P: No breeding attempt made this year	None		
49	Gibble	F	GPS, RT	GPS ceased to function 19 th December 2013. Radio tag stopped Nov 2014. Still wearing back pack when sighted in	re-bk-bl	Paired with Lofty (2011 male) early in the year in Somerset. Seen at WWT Slimbridge in March and then not seen again. Both observed eventually on	C: 1 breeding attempt 2 eggs hatched 1 chick survived to	2016: 1 fledged chick		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
				November 2015. Backpack – no further information during 2016		private land near Newport , S Wales, Incubation of 2 eggs commenced on 21 st April. Both eggs hatched and one chick reared to fledging. The pair returned to Somerset with their chick in September.	fledging			
50	Elizabeth Royal	F	PTT	Satellite tag ceased to function 27/07/2014.	wh-re-bl	Paired with Phelps(2012 male) at WWT Slimbridge as last year. 1st attempt incubation start date unknown but failed on 7/8 May cause unknown. 2 nd attempt in the same area was abandoned after 24 days	C: 2 breeding attempts, both failed	2016: 2 clutches, both failed at egg stage		
52	Chocolo	M	RT	Radio tag known failed in October 2015 – could have failed over the summer.	bk-gr-bl	Paired with Tamsin (2010 female) on West Sedgemoor in January , then in WWT Slimbridge and back in Somerset in April. Eventually they were identified at Flemington Moor in South Wales. It is not known whether a breeding attempt was made but later were observed without chicks	P: Unknown - but no chicks present – so failed.	2015: Unknown – but failed to fledge 2016: Unknown but failed to fledge		
53	Alexander	M	PTT	PTT Satellite tag ceased to function 19/12/2013.	wh-bk-bl	Paired with Swampy (2011 female) as last year and set up territory on private land on Kingsmoor in early April. 1 st attempt failed due to a cause unknown. 2 nd attempt in a rye grass field on private land at the end of April also failed after 12 days – cause unknown. 3 rd attempt in the same area in late May went full term. 1 egg hatched, fledged and returned to West Somerset.	C: 3 breeding attempts. 2 failed at egg stage and the 3 rd resulted in one chick.	2015: 2 chicks to fledging 2016: 1 chick to fledging		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
54	Midnight	M	PTT	Satellite tag ceased to function 15/04/2014.	bl-re-bl	Assumed paired with Gemma (2010 female) as last year and first seen in Wiltshire in March by private landowner. Reported definitely incubating in May – eggs laid probably in April. Partner Gemma observed with chick off North Drove, W Sedgemoor, Somerset on 31 st August. No sign of Midnight since May and to date by end of year. It is assumed that he must have died sometime during the summer.	C: 1 breeding attempt 1 chick fledged.	2015: 1 fledged chick 2016: 1 fledged chick		Missing since May
56	Evie	F	RT	Radio tag failed autumn 2015 .	bl-ye-bl	Evie remained at WWT Slimbridge all year. She showed no sign of pairing up or making a breeding attempt .	N: None	None		
58	Haribo	M	GPS,RT	GPS ceased to function Dec 2013. Radio tag ceased to work Mar 2014. Back-pack straps seen hanging low in late October 2015. November re-sightings recorded him without backpack.	bl-bk-bl	Paired with Twinkle (2010 female) again this year on Westmoor. Breeding attempt started on 12th April but failed after 12 days due to presumed corvid predation. No further attempts made.	C: 1 breeding attempt, failed at egg stage	2016: 1 clutch, failed at egg stage		
60	Wycliffe	M	GPS, RT	GPS ceased to function Oct 2013. Radio tag failed over summer 2015. Not functioning by October 2015. Still wearing back pack when sighted in November 2015. Backpack – no further information during 2016	ye-wh-bl	Paired up with Maple (2012 female) . Sighted on RSPB Otmoor, Oxfordshire as last year. 1 st attempt incubation started on 6 th April and went full term. 2 chicks hatched but predated after 17 days – probably by a fox.	C: 2 eggs incubated to hatch date, then predated,	2015: 2 eggs failed to hatch 2016: 2 eggs hatched but chicks predated.		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
61	Willow	M	GPS, RT	GPS ceased to function Oct 2013. Radio tag ceased to function by Oct 2013. Still wearing back pack when sighted in November 2015. Recaptured at Slimbridge in June 2016 and ECOTONE tag fitted. Back pack removed.	ye-gr-bl	Appeared paired with Buttercup, but no sign of breeding attempts. Suffered ill health during the spring and died sometime in July. Thought to have been predated.	P: No breeding attempts	None DIED 2016	15/07 2016 (approx)	Dead
62	Wiz	M	RT	Radio tag ceased to function by Oct 2013.	bk-ye-bl	Wiz remained on the Somerset Levels and Moors throughout the year, being seen on an off through the summer.	N: No breeding attempt made this year	None		
63	Shadow	M	GPS, RT	GPS stopped during Summer 2014. Radio tag ceased to function by Oct 2013. Back pack appears to have been partly shed – straps seen dangling and tangled around legs from July through to October 2015. Still wearing back pack when sighted in November 2015 with straps hanging low. Straps still hanging about his legs in February 2016 but not after that so assume it has fallen off.	Gr-re-bl	Observed setting up territory with Cherry (2013 female) on Walton Moor early in the year. Mating witnessed. No evidence of nesting was found. Later in the year he was seen with Christmas Shoes on Kingsmoor	P: No breeding attempt made this year	None		
64	Maple-Glory	F	RT	Radio tag ceased to function by Oct 2013.	Gr-wh-bl	Paired with Wycliffe (2012 male) and returned to RSPB Otmoor, Oxfordshire as last year. Incubation started on 6 th April and went full term. 2 chicks	C: 2 eggs incubated, hatched then predated,	2015: 2 eggs failed to hatch 2016: 2 chicks hatched, both predated		

[illegible]

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
70	Cherry	F	ECO	Ecotone tag stopped working Dec 2013.	re-wh-ye	Paired with Shadow ((2012 male) early in the year and occupied territory on Walton Moor. Seen mating but no evidence of nesting was found. In August she was seen with Cleg at RSPB Greylake.	P: Paired up but no breeding attempt made this year	None		
71	Cotton	F	GPS, RT	GPS ceased to function Oct 2014. Radio tag not working when in Somerset in autumn, so assumed failed during the year. Not known if still wearing backpack.	re-bl-ye	Appeared to be paired up with Oakie (2013 male) and remained at WWT Slimbridge from Jan to September. Possibly nested, but not confirmed. Recorded in Somerset in October, at Slimbridge in November and then Somerset again in December.	P: Possible nesting attempt with Oakie this year – but not confirmed.	2016: Possible nest only		
72	Waterwing	F	RT	Radio tag failed in March 2016	re-gr-ye	Part of Somerset non-breeding flock. Not yet paired up though seen with Manfred (2013 male)	N: No breeding attempt made this year	None		
74	Acorn	F	RT	Radio tag working Dec 2016	wh-re-ye	Remained in Somerset throughout the year. Not yet paired.	N: No breeding attempt made this year	None		
76	wh-gr-ye	M	GPS, RT	Radio tag working when died, Nov 2013. Tag used to locate remains.	wh-gr-ye	Died November 2013. Cause unknown. Rings and remains found on West Sedgemoor	-	-	01/11 2013	01/11 2013
77	Billy	M	RT	Radio tag working Dec 2015. Not known if still working during 2016.	wh-bk-ye	Spent Jan and Feb in Somerset and then turned up at WWT Slimbridge where he set up a territory with Squidgy. Prospected for nest site, but no breeding attempt. Last identified at WWT Slimbridge in September 2016	P: Paired and territorial, but no breeding attempt made this year	None		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
79	Excalibird	F	RT	Radio tag working intermittently March 2015 failed by end of summer 2015.	bl-wh-ye	Remained in Somerset. Seen to associate with Pepe (2014 male) but no attempt at breeding.	N: No breeding attempt made this year	None		
80	Viridor	F	RT	Radio tag failed in September 2016.	bl-re-ye	Apart from a brief visit to WWT Slimbridge in April, Viridor remained in Somerset. No evidence of either pairing or nesting attempts.	N: No breeding attempt made this year	None		
81	Bop-Bop	F	GPS,RT	GPS ceased to function 20 th May 2014. Radio tag still working Dec 2015. Still wearing back pack when sighted in November 2015.	bl-bk-ye	Apart from a brief visit to WWT Slimbridge in April, Bop-Bop remained in Somerset as far as could be known. Seen with Bombus on and off but no evidence of either pairing or nesting attempts.	N: No breeding attempt made this year	None		
82	Skye	F	ECO	Ecotone tag stopped working Dec 2013.	ye-re-ye	At WWT Slimbridge in March and April. Appeared to be paired with Stowford. Then missing for much of the summer and autumn. Recorded again in Somerset in December.	P: No breeding attempt made this year (but missing for large part of the summer)	None		
83	Stowford	M	RT	Radio tag failed in April 2016	ye-wh-ye	At WWT Slimbridge in April, and appeared paired with Skye. Then not recorded from May to August, but resighted in September in Somerset. No evidence of nesting attempts.	P: No breeding attempt made this year (but missing for large part of the summer)	None		
84	Sven	M	GPS,RT	GPS and Radio tag working when euthanased March 2014.	ye-bl-ye	Collision injury lead to euthanasia at RSPCA March 2014. Injuries suggested probable powerline or other obstacle	-	-	08/03 2014	
85	Stanley	M	RT	Radio tag working Dec 2015.	ye-gr-ye	Stanley was found dead having flown into a barbed wire fence in February 2016 on the WWT Slimbridge	N/A	None	29/02 2016	

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
						Reserve.				
86	Bombus	M	RT	Radio tag ceased to function Nov 2014.	ye-bk-ye	Bombus was in Somerset for the start of the year and then recorded in April at WWT Slimbridge. June he was back in Somerset, with Sep/Oct spent back at WWT Slimbridge, and Nov/Dec in Somerset. He has been seen associating with BopBop (2013 female) on occasions.	N: No breeding attempt made this year	None		
87	Manfred	M	ECO	Ecotone ceased to function August 2015.	gr-re-ye	Remained in Somerset as far as could be known. No evidence of either pairing or nesting attempts. Seen with Waterwing (2013 female) on Wetmoor during the summer.	N: No breeding attempt made this year	None		
88	Buttercup	F	RT	Radio tag not assessed this year .	gr-wh-ye	Remained at Slimbridge. Appeared to pair up with Willow, but no record of any attempts at breeding probably due to moult. Buttercup's remains were found on 22 Sept and it is thought that she probably died of disease.	P: Paired but no breeding attempt made	None	July 2016	
89	Cookie	F	RT	Radio tag ceased to function Jan 2015.	gr-bk-ye	Remained at Slimbridge and seen associating with Oakie (2013 male), not known to be paired, and no record of a breeding attempt.	N: No breeding attempt made this year	None		
90	Frieden	F	RT	Radio tag working, although possibly failing when birds went missing, Dec 2013.	bk-re-ye	Went missing December 2013. A ring reading from Diepholz area of Germany received in December 2016 matching Frieden's combination – TBC.	-	-		Missing Dec 2013

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
91	Oakie	M	RT	Radio tag ceased to function May 2014.	bk-wh-ye	Remained at Slimbridge for most of year, and appeared paired with Cotton, with possible nesting attempt made. Also associated with Cookie (2013 female) . Recorded as being in Somerset in December.	P: Possible nesting attempt with Cotton this year	2016: Possible nest only		
93	Misty Moor	M	RT	Radio tag ceased to work March 2014. Bird went missing May 2014.	bk-gr-ye	Went missing May 2014. No further sightings.	-	-		Missing May 2014
2014 release year										
94	Chip	F	RT	Radio tag ceased to work over Summer 2015.	re-wh-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
95	Pecky	M	GPS,RT	Radio tag working until March 2016 Backpack ceased to work during the summer 2016 Not assessed if still wearing by Dec 2016.	re-bl-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
96	Soar	M	RT	Radio tag working Dec 2016.	re-ye-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
97	Ted	M	RT	Radio tag failed November 2015.	bk-ye-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
98	Patience	F	GPS,RT	Radio tag working Dec 2016. Backpack ceased to work during the summer 2016 Not assessed if still wearing by Dec 2016.	wh-re-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
100	Century	F	RT	Radio tag failed from March 2016	wh-ye-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
102	Dillon	M	GPS,RT	Radio tag ceased to work during summer 2015. Backpack ceased to work during the summer 2016 Not assessed if still wearing by Dec 2016.	bl-re-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
103	Rosa	F	RT	Radio tag working Dec 2016.	bl-wh-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
104	Sherbert	F	GPS, RT	Radio tag failed – end Nov/December 2015 . Backpack ceased to work during the summer 2016 Not assessed if still wearing by Dec 2016.	bl-ye-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
105	Kia	F	GPS,RT	Radio tag working Dec 2016. Backpack ceased to work during the summer 2016 Not assessed if still wearing by Dec 2016.	wh-bl-bk	Apart from a brief visit to WWT Slimbridge in April, Kia spent the year on the Levels and Moors	N: 2 year old bird	None		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
106	Yellow Red Black	M	GPS, RT	Radio tag working when found dead in November 2015 Backpack still functioning when found dead in November 2015.	ye-re-bk	Found dead in November 2014. Likely died around 25 th Oct. Body not scavenged – rotted in field, Post mortem inconclusive as to cause of death. Unlikely predation. Leg injury observed.	-	-	05/11 2014	
107	Diamond	F	RT	Radio tag working until October 2016 – failed Nov 2016	ye-wh-bk	Apart from a brief visit to WWT Slimbridge in April, Diamond spent the year on the Levels and Moors	N: 2 year old bird	None		
108	Gary	M	RT	Radio tag working until September 2016 when it fell off And was recovered from West Sedgemoor	ye-bl-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		
109	Cleg	M	ECO	Ecotone tag working Dec 2016 2015	bk-gr-bk	Spent the year on the Levels and Moors. Possibly seen paired with another bird, but not identified	N: 2 year old bird	None		
110	Pepé	M	RT	Radio tag failed Dec 2015.	gr-re-bk	Apart from a brief visit to WWT Slimbridge in April, Pepe spent the year on the Levels and Moors. Seemed to associate with Excalibird and seen together near Carymoor in Spring.	N: 2 year old bird	None		
113	Ziggy	F	RT	Radio tag fell off in late November 2015. Still working and retrieved from Hambridge block, West Sedgemoor.	bk-re-bk	Spent the year on the Levels and Moors	N: 2 year old bird	None		

No.	Name	Sex	Tag	Tag outcome	Ring combo	Annual summary 2016	Annual breeding outcome C = confirmed P = paired up N = non-breeding	Breeding outcome to date	Date of death	Other removal from programme
114	Humbug	F	RT	Radio tag working when found dead in November 2015.	bk-wh-bk	Found dead on West Sedgemoor Nov 2014. Scavenged by predator. Cause of death unknown.	-	-	03/11 2014	

Appendix - Photos.



Photo: Katie Horrocks Sedge and Monty at their nest - Slimbridge 2016



Photo: Peter O'Duffy Lofty and Gibble and their chick – South Wales 2016



Photo: Kevin Harris

Gemma and her chick - Somerset 2016



Photo: John Crispin

Swampy and Alexander with their chick - Kingsmoor, Somerset 2016



Photo: Damon Bridge

Swampy and Alexander's chick successfully ringed – August 2016



Photo: Damon Bridge

Swampy and Alexander's chick successfully ringed – August 2016



Photo: John Crispin

Ringed chick with parents- September 2016

Extraordinary Events.

- This year saw the first confirmed shooting of a released crane, Swampy. Although shooting was a possible reason for the disappearance of a crane in 2010, this bird is the only confirmed shooting. As the best breeding female in the project – she is a significant and very sad loss. A reward of £1,000 was offered by private individuals, matching the £1,000 offered by the RSPB investigations team but, to date, no evidence has come to light that could lead to a conviction.
- This year saw the first ever wild-reared crane caught and ringed in the UK, with the crane ringed using the EUCWG convention of colour rings and metal BTO ring by a local ringing team headed up by BTO ringer Alison Morgan.
- On December 13th a report was received from Germany of a colour ringed crane, Black-Blue-Black left leg, Black-Red-Yellow right leg in with a flock on maize near Holsingerort, North Rhine Westphalia which is near the Diepholz roosting/stop-over migration site. This combination was fitted to the female crane, Frieden, released in 2013 who has not been seen since December of that year. It is possible that she flew to the continent and has been living with the continental birds since then – but we await a further sighting or photograph for full confirmation.