

Mauritius Kestrel: Eastern Subpopulation

2008/09 Breeding Season Report



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ACKNOWLEDGEMENTS

This season's monitoring of the East coast subpopulation of Mauritius kestrels has been motivated and carried out by the University of Reading.

The fieldwork required to document the breeding of the kestrels over a six month period remains a challenging but immensely rewarding task. The data collected is still in use by various institutions and this would not be possible without the long-term commitment of Carl Jones and the Mauritian Wildlife Foundation to the recovery and ongoing conservation of the species.

In carrying out the fieldwork this season I am particularly grateful to Andrea Gear for her great day-to-day physical efforts, spirited temperament and tremendous capability in the field. Never will cutting and crawling through impenetrable undergrowth in order to scout new breeding locations be so mirthfully undertaken, or will summits be reached with such a dependable supply of chocolate biscuits.

The Mauritian Wildlife Foundation and University of Reading provided assistance of a practical nature, which was invaluable. I am very grateful for the support they provided in this and previous field work seasons. I would also like to thank Malcolm Nicoll for his encouragement, advice and enthusiastic assistance in the field, and Marie Nevoux, who demonstrated unfailing energy and patience in the field despite such a brief initiation.

The fieldwork this year forms part of a PhD and wider research programme that has been directly supported with grants from the BBSRC and NERC. In addition, the Mauritian Wildlife Foundation is supported in the long-term monitoring of the Mauritius kestrel populations by the Domaine d'Anse Jonchée, Peregrine Fund and National Parks and Conservation Service (Government of Mauritius).

However, the bedrock of this programme is the continuing support and co-operation of the chasses within the Bambous Mountains, and I am grateful to the following for allowing us access and for hosting nest boxes:-

Domaine d'Anse Jonchée
Domaine de l'Etoile
Ferney Valley
Le Vallon
Riche-en-Eau
Chemin Francais
Vallée de l'Est
Domaine de l'Ylang Ylang

Sam Cartwright, March 2009

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OVERVIEW

Breeding and Geography

This is the twenty-second year of monitoring the Mauritius kestrel population on the East coast. This year an exceptionally high number of territorial pairs were documented – 46 in all. Whilst three of these pairings did not result in an actual breeding attempt, 43 of the pairs were known to have laid eggs. As a result there were 56 fledglings in this year's cohort, of which all but two were fitted with identity rings.

This year also saw the discovery of two brand new natural nesting sites and the first occupation of an existing nest box which had been simply repositioned last season. The two new natural nest sites - a tree and a cliff cavity – occur in Ferney Valley and the hitherto-unused nest box is located in Etoile. In addition a 'possible' pair were observed on the north-east face of Lion Mountain. Conversely, some well-used nest sites this year lay devoid of kestrel activity with the respective pairs absent from the breeding record.

The range of the kestrel breeding population has not been shown to have expanded this year; however the increase in the density of breeding pairs reveals ongoing changes in the population's ecology. It also highlights the importance of exhaustive monitoring strategies since pair bonds do not always form and persist for the entire duration of the breeding season and may, through chance timing, not be documented at all. But pair bonds reveal a great deal about the territorial organisation of kestrels and from their distribution throughout the mountain range we can gain insight into the requirements of the species for its reproduction and survival.

Productivity

At least 156 eggs were laid this season. 132 of these were in first clutches, while 24 were laid in just the nine second clutches documented. The earliest eggs were laid at the beginning of September by the pair at Undetected cliff in Le Vallon, whilst the majority were laid after the heavy rains in September. The very last eggs of the season to be laid were in early February by a pair occupying the Ferney 5 box.

The oldest breeding bird this season is a twelve-year-old female breeding at Powerstation Cliff in her eleventh consecutive breeding season. The largest brood this season was a four-chick brood at Mount Camizard 5 box, all of which fledged successfully. The most in-bred fledgling this season was produced by the pair at Riche-en-Eau 13 who are a brother and sister pairing. The furthest recorded distance travelled by a breeder from their natal to breeding territory this year was by the Riche-en-Eau 9 female in her first year having travelled from Ylang Chasse. The furthest documented travelled by any bird this season was the journey of the Etoile 1 female who was found in Moka in early February, shortly after a cyclone. She is thought to have travelled approximately 18 km from her breeding ground.

A good number of the breeding kestrels still retain an aggressive nature towards intruders and will mob visitors to their nest site. This year the most aggressive couples were the Riche-en-Eau 2 and Mount Camizard 5 pairs, whilst the breeding females at Mount Camizard 1, Ylang Ylang, East Rock, and Kartoffelklotz were once again noted for their zealous nest protection. In addition, the breeding females at Domaine du Chasseur Car Park and Domaine du Chasseur 8 nest boxes developed a particularly aggressive nature following the start of a feeding programme at both sites.

Mauritius kestrels are not the only species to utilise kestrel nest boxes. This year there were bees' nests in five boxes, Indian mynah nests repeatedly made in six boxes, white-tailed tropicbirds nesting in five boxes and also in two previously-used natural kestrel nest cavities. The nest boxes represent the majority of the nest site opportunities for the breeding kestrel population with 51 boxes available and this season 34 in use. Repair and replacement of nest boxes remains one of the time-consuming but necessary tasks during the season and

this year eight boxes were replaced, each expected to have a lifespan of 5 - 8 years, depending on location. The ratio between nest types used this season was 72% boxes (34 pairs); 23% cliff cavities (11 pairs); 4% tree cavities (2 pairs).

Eight unringed individuals turned up in the population this season, with six breeding birds and two non breeders observed. This is evidence that a percentage of breeding attempts producing fledglings are missed each season and/or fledglings are not being ringed due to breeding attempts at inaccessible cavities. In addition, this season saw a worryingly large number of birds with faded or missing colour rings which hindered identification, and necessitated the trapping of twelve individuals for identification. A further nine birds could not be identified since they could not be trapped. The use of cellulose colour rings in past years is the likely culprit since these rings fade and structurally deteriorate in sunlight, and the specific cellulose rings used in recent years have appeared to deteriorate particularly rapidly. The rings in current use are made from darvic plastic which is less likely to fade or crumble with wear, but is available in a reduced range of colours. In the immediate future the issue of how to mark birds so that they are readily identifiable in the field needs to be addressed, since there is a reduced range of colour combinations now available with which to mark the new recruits.

Trapping Adult Females on the Nest

Every year it is necessary to trap adults to identify them if colour rings are missing or the bird is unringed. However the large number of unidentifiable birds this season prompted a trial of a technique previously used with success on sooty falcons and Mauritius kestrels. At a time in the breeding cycle when the female is incubating her clutch, the eggs are removed and replaced with dummies, over which a noose carpet is laid. When the female re-enters the box she is trapped on her eggs, with no risk to the real clutch and with practically a 100% success rate. This makes the technique much more efficient than baited trapping, which still needs to be used for trapping male kestrels and females without a clutch. The technique was used on seven females this season, although where it was used at Ferney 3 it was the likely cause of the female deserting her nest, probably because an insufficient amount of time had elapsed during incubation, before the procedure was undertaken. Whilst the technique has been used extensively on other falcons, and provides a quick, efficient method of trapping female breeders when needed, the experience causes the birds a certain degree of stress, which is directly associated with disturbance on the nest, and risks them deserting their clutch. For this reason, trapping should only be conducted when the female has been incubating for at least 15 days, and up to five days before the expected hatching date. The technique should not be used to trap unringed females.

Baited Trapping

Baited trapping was still required to catch male kestrels and females not incubating a clutch. A great deal of trapping was needed this season and as usual this involved the use of a Bal Chatry trap with live bait (usually the brightly-coloured male Madagascar fodies). This was conducted with success at Ferney 12, Ferney 4, Owen's House, Ylang Ylang and Mount Camizard 1 to trap male kestrels. At Mount Camizard 5 the female was caught this way, and at Etoile 9 a noose-carpet worn on a hat was used to trap the female by exploiting her mobbing-behaviour. Baited trapping was also attempted for the males at Etoile 2, Mount Camizard 5 and Ferney 7, but without success.

Feeding Kestrels for Ecotourism

The breeding pair at two of the box sites within the Domaine d'Anse Jonchée have this year been co-opted for training as part of an eco-tourism programme. The box at the car park had previously been the focus of a feeding programme and has therefore long been excluded from the long-term productivity database created and maintained by Reading University. An additional nest site, Domaine du Chasseur 8, which is higher up the mountain, is the second

site chosen for the training programme and will also be excluded from the research database this year. The feeding programme was launched on 27th October, with both adult kestrels in each pair being fed various prey items throughout the breeding season. The fledglings at each site were also fed. Notably, since the Ferney 1 pair from last year have been replaced by a new pairing, the feeding regime at that location has lapsed, and serves as a reminder that such enterprises need to be carefully planned and consistently practiced if they are to be maintained in spite of the natural changes in territory occupation that occurs in wild populations.

Minimum Population Estimate

There were 92 breeding individuals, 56 fledglings, and 9 'floating' adult kestrels directly observed this season, totalling 157 birds. In all likelihood the size of the Bambous Mountains population of Mauritius kestrels remains in the region of 200-250 individuals.

BREEDING SITE SUMMARIES

The following paragraphs are summaries of breeding productivity at each monitored site on the East coast. The numerical prefix to the site name refers to the breeding pair identified at each site, and the site code used in analyses follows the site name.

LION & BAMBOUS MOUNTAINS

These breeding sites are collected into one group even though they are not contiguous on the map because they all occur on crown land. Only one of these nesting sites is a managed box, the others are all nests in cliff cavities which have been in use previously, excepting the detection of a possible pair of kestrels on Lion Mountain. There is no previously detected nest site in the vicinity of the location the pair was detected, and the actual nest site, if present, was not detected this year, thus the pair are noted but not included in the pair count.

i) Lion Mountain (LM)

Female: Unconfirmed
IRN: -

Male: Unconfirmed
IRN: -

First egg date (and clutch size): Unknown

Possible pair:

The first sign of kestrels present in the North-Eastern region of Lion Mountain was during an exploratory visit to the summit on the 22nd November along the tourist route which starts between Pavilion Grand Port and Bois des Amourettes. A kestrel repeatedly flew West-East carrying prey, and would return empty-handed. The behaviour suggested a male provisioning chicks at a nest somewhere on the North-East face of the mountain, potentially at a nesting location hitherto undetected in the monitoring programme. At the time of the visit the nearest active nest in this direction was Black Bowl, where the female was still incubating an egg, and where the male's observed behaviour did not appear to involve trips to Lion Mountain. A watch from the sugar cane on this area of the mountain on 2nd December revealed a pair of kestrels interacting frequently, with aerial behaviour more suggestive of early courtship displays than advanced breeding. Behaviour was focussed around the trees just above the North-East facing cliffs. An exploratory visit to access this area of the cliffs, beginning in the Domaine valley, revealed a pair of kestrels interacting in and above the trees surrounding the cliff face, but not showing signs of involvement in a current breeding attempt. It is possible that the pair were young birds not yet settled on a nest site, or that an earlier breeding attempt – producing chicks – had failed before the watch on 2nd December.

Chicks: Unknown

1) Koala Cliff (KC)

Female: Pink / ID (L); Red (R)

IRN: 5A04645 (wild hatched from Domaine du Chasseur 8 in 2003/04)

Male: Unconfirmed

IRN: -

First egg date (and clutch size): None laid.

Breeding Summary:

At the first visit on 20th October, last year's nest cavity was accessed, and the pair were present, attacking. The cavity contained the remains of a white-tailed tropic bird, but no sign of a nesting attempt. The female was identified as last year's breeder, who has bred here for three years in succession. The male's identity remained unknown. The pair were seen copulating in the trees below the cliff on 14th November, but there remained no sign of a nest, and a number of visits and watches at the site later in the season revealed non-committal pair behaviour suggesting no real breeding attempt was made.

2) Bambous Virieux 3 (BV3)

Female: ID (L); Yellow / Brown (R)

IRN: 598393 (wild hatched from Domaine du Chasseur 7 in 2001/02)

Male: ID (L); Red / Dark Green (R)

IRN: 598224 (wild hatched from Domaine du Chasseur Car Park in 1998/99)

First egg date (and clutch size): 29th September - 2nd October (3 eggs)

Breeding Summary:

This pair bred together last year and for the preceding three years. On the first visit to the box on 13th September the female was present in the box tree and attacking, and a food pass was observed, although the nest box was empty. Three warm eggs were found on the 9th October, and by a visit on 12th November there were two chicks, of four days old, and the remaining unhatched egg. The chicks were ringed on 27th November at nineteen days old, and were found to be healthy and ready to fledge at a check on the 10th December. There was no attempt at a recycle by the pair, and no sign of the family nearby at the final check in January.

Chicks: 5A09750 – ID (L); Black / Red (R)

5A12301 – ID (L); Black / Grey (R)

3) Isenguard Cliff (ISC)

Female: Unrung

IRN: -

Male: Pink / Brown (L); ID (R)

IRN: 5A04575 (wild hatched from Bambous Virieux 3 in 2004/05)

First egg date (and clutch size): 30th September – 4th November (1 egg)

Breeding Summary:

This is a new pairing at this nest site, although the female is likely to be the same unrun bird breeding here last year. The male is breeding here for the first time, although he previously

bred at Bambous Pinnacle in the 2005/06 season. In the interim period he had been held at the Gerald Durrell Endemic Wildlife Sanctuary, and was released in good health in Ferney valley on the 30th September. By the first watch on the Isenguard site on 30th October, he was already involved in a breeding attempt with the incumbent female, and when the nest was accessed on 4th November, the female was incubating a single, yellowish egg. The female was still incubating when the cavity was checked on two more occasions in November and December, by which point it was probable that the egg was infertile and unlikely to hatch. A watch for activity from below the cliff in early January showed no sign of the breeding pair, save for a lone individual flying along the ridgeline towards the Cat and Mouse peak.

4) **Big Malc (BM)**

Female: Unconfirmed
IRN: -

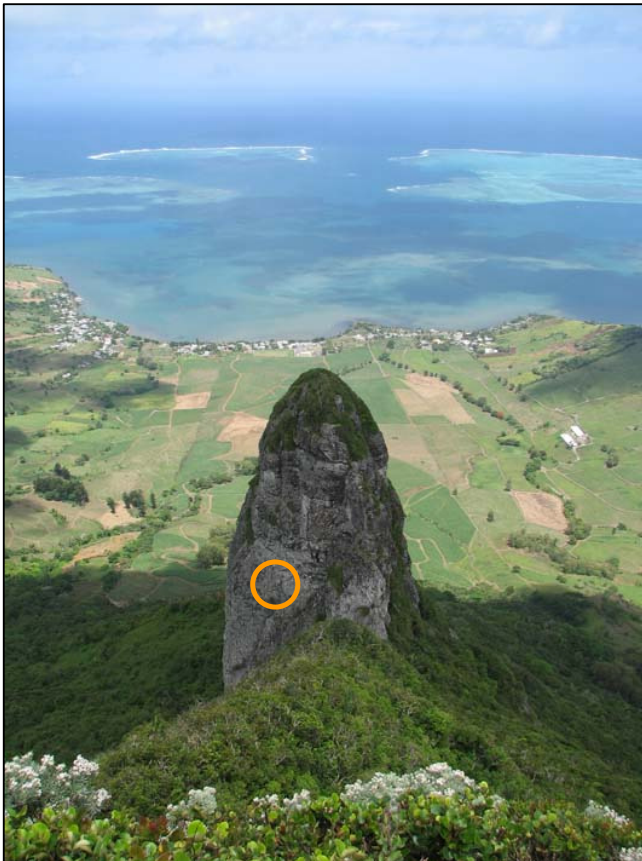
Male: Unconfirmed
IRN: -

First egg date (and clutch size): Unknown

Breeding Summary:

At the first watch on 25th November a pair of kestrels was observed leaving and re-entering a cavity on the North face with food items. With this behaviour it is likely that they were feeding chicks. With the cavity inaccessible for ringing these chicks, the next visit ascertained that the pair had produced two fledglings, which were seen flying in and around the pinnacle on 30th December.

Chicks: 2 unrunng fledglings



Big Malc nest cavity on the Bambous Pinnacle, seen from Bambous Mountain. The kestrel nest cavity is circled.

Photo: S .Cartwright, Nov 2008.

DOMAINE VALLEY

The following sites labelled as Domaine du Chasseur all refer to the recently renamed Domaine d'Anse Jonchée.

5) Domaine du Chasseur Car Park (DCCP)

Female: Red / Grey (L); ID (R)
IRN: 5A04762 (wild hatched from Titmalot in 2005/06)

Male: Purple (L); Grey / ID (R)
IRN: 5A09678 (wild hatched from Domaine du Chasseur Car Park in 2007/08)

First egg date (and clutch size): Approximately 12th October (3 eggs)

Breeding Summary:

Both individuals are breeding for the first time, with the male one of last year's offspring from this site. Last year's breeding female was found dead in this nest box at the beginning of the season.

A pair was seen foodpassing in the vicinity of the site during the first visit in mid-September. It was not until visiting on the 22nd October that a clutch of three eggs was found, but it was soon after this visit that a kestrel-feeding programme was initiated at the site by the chasse as part of an ecotourism venture. One unfortunate effect of this feeding programme was an immediate increase in the aggression of the female toward visitors, and she remained highly aggressive during all box checks. By the 20th November, there were three chicks of about three days old in the box, although a follow-up check found them to be in a poor condition, with the smallest chick lacking a great deal of body weight and the second chick with a highly distended crop. The pair were still food-passing nearby, and a mixture of prey items, including *Phelsuma* geckos, agamid lizards, and shrews were seen being brought in. The nest box itself was particularly full of rotting and half-consumed prey items. Between checks on 10th and 11th December the smallest chick had died, and it was not until 17th December that the remaining two were deemed large and healthy enough to ring, at the age of 30 days. Both chicks had developed nicely, but were still likely to be more than five days away from fledging at this point. One of the chicks had a large weeping cyst on the cere next to the bill. During a pre-fledge check on 24th December, only one chick remained in the box, however the kestrel trainer at the chasse had seen the second fledgling around after this date, suggesting an earlier fledge-date. On the 28th December, the breeding male was unfortunately found dead in the grounds of the Domaine, with injuries consistent with an impact. Following this loss, there was no attempt by the female to recycle with a new partner.

Chicks: 5A12335 – White / Dark Blue (R)
5A12336 – White / Dark Green (R)



The three DCCP chicks. Photo shows distended crop on the chick in the foreground. The small chick seen behind did not survive to be ringed.

Photo: S .Cartwright, Nov 2008.

6) Domaine du Chasseur 8 (DC8)

Female: Black . ID (L); Orange (R)

IRN: 5A04800 (wild hatched Domaine du Chasseur Car Park in 2006/07)

Male: ID / Orange (L); Red (R)

IRN: 5A04584 (wild hatched from Domaine du Chasseur 8 in 2004/05)

First egg date (and clutch size): Approximately 3rd October (3 eggs)

Breeding Summary:

Whilst the male has bred here for the past three years, the female is a newcomer, having bred last year at Ferney 2A, a nest box which this year lies empty.

Three warm eggs were found in the box on 22nd October, and they had all hatched by a visit on 12th November when three chicks of four days old were found. Two of the chicks survived to be ringed on 1st December, one of which had a very hard, distended crop. The breeding female was also highly aggressive, and rarely left the box area when it was being accessed. This breeding pair were also being fed to train since 27th October. Both chicks were deemed healthy and ready to fledge during a check on the nest on 10th December, and at a follow-up check in early January, nobody but the female was about. No recycle attempt was made.

Chicks: 5A12317 – ID (L); Orange / White (R)

5A12318 – ID (L); Orange / Red (R)

7) Ylang Ylang (YY)

Female: Black / ID (L); Purple (R)

IRN: 5A04754 (wild hatched from Ylang Ylang in 2005/06)

Male: ID (L); Grey / Grey (R) (previously Red / ID (L); Pink (R))

IRN: 5A04798 (wild hatched from Ylang Chasse in 2006/07)

First egg date (and clutch size): 4th November (3 eggs)

Breeding Summary:

The female at this site has bred here for past two seasons, whilst her partner is breeding for the first time at the age of two. The pair prospected the box early in the season, however it was consumed by a large bees' nest until mid-October, when the removal attempts finally succeeded. The female exhibited her typical attacking behaviour from previous years. The male was trapped in order to be re-rung since he shared his colour combination with a 2007/08 fledgling.

A visit on 31st October found the nest empty but with the pair present and copulating. By a visit on the 5th November two warm eggs were discovered in the box, although this number was found to have increased to three by the following check on 12th November. They were found all hatched, at about five days old on 14th December, and were subsequently ringed on 27th December at about eighteen days old. The final check on 7th January found them both ready to fledge.

Chicks: 5A12342 – Grey / Yellow (L); ID (R)

5A12343 – Grey / Dark Green (L); ID (R)

8) Ylang Chasse (YC)

Female: ID (L); Grey / Yellow (R)
IRN: 5A09734 (previously unringed)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 21st October (3 eggs)

Breeding Summary:

This is a new pairing at this site. The unringed female was caught and ringed on 12th November, and the male was identified when he arrived with food. However, the male's identity remains unknown because his combination does not correspond to any known combinations.

There was no sign of occupation when the box was first checked on 19th September, but both birds were present and foodpassing by the second visit on 9th October. A single cold egg had been laid by 22nd October, which increased to three by the subsequent check on 31st October. However, by 10th December, two sets of hatched eggshell were found in the box, but it was devoid of chicks, although there were still signs that the box was in use. On a subsequent visit on 14th December the female flew out of the box when it was accessed, and a scrape had been made in the substrate, but there were no new eggs. The final check on 20th December found the site empty and with no signs that it was any longer in use.

9) Ylang Forest (YF)

Female: Black / Yellow (L); ID (R) (previously Orange (L); Dark Green / ID (R))
IRN: 5A04594 (caught as an adult at Ylang Forest in 2004/05)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 18th October (3 eggs)

Breeding Summary:

The box at this site was replaced at the end of last season making the site available for use. It has been thought that birds have been breeding in this forest in a natural, undetected tree cavity, and so it is useful that this year the box is in use and the breeding attempt is being monitored. The female was missing a colour ring, and so on 12th November she was caught and re-ringed. She had previously bred at this box for three seasons, but the box was rotted and unusable last season. She was not recorded as breeding in 2007, and so it is likely that she found an alternative nest site that was not detected during the breeding season.

The first visit on 13th September found the box empty, but defended by a kestrel. The following visits on the 28th September and 9th October found a scrape in the substrate, but still no eggs or any close encounters with the pair. However, by a check on 22nd October, there were two cold eggs in the box, along with the breeding female. She was incubating the full clutch of three eggs at a check on 31st October, but at the subsequent box check on 10th December, all that remained was a single cold egg. The adults were not present. There was no further sign of the pair on subsequent visits in December and January.

10) East Rock (ER)

Female: - / ID (L); Black (R)

IRN: 5A04601 (wild hatched from Ferney 7 in 2003/04)

Male: White / ID (L); Black (R)

IRN: 5A04623 (wild hatched from Ferney 6 in 2003/04)

First egg date (and clutch size): 29th September (4 eggs)

Breeding Summary:

This pair have been breeding together at this box for the last two seasons. They have been consistently productive, raising chicks that fledge every year. One of the pair was present during the first visit on 19th September, although eggs were not found in the nest box until 3rd October, when two cold eggs were discovered. This clutch was increased to four by the subsequent visit on 22nd October. A visit just after the expected hatch date, on 5th November, found three newborn chicks and the remaining egg, which did not subsequently hatch. The chicks were ringed on 1st December. A check timed just prior to the expected fledge date found the three chicks healthy and ready to fledge, and a follow-up check on 24th December found the site empty, with no recycle attempt made by the pair.

Chicks: 5A12314 – ID (L); Dark Green / Red (R)

5A12315 – ID (L); Dark Green / Yellow (R)

5A12316 – ID (L); Orange / Yellow (R)

11) Vallée de l'Est (VDL)

Female: White (L); Dark Green / ID (R)

IRN: 5A04718 (wild hatched from Ylang Ylang in 2005/06)

Male: Yellow / ID (L); Pink (R)

IRN: 5A04719 (wild hatched from Domaine du Chasseur Car Park in 2005/06)

First egg date (and clutch size): Approximately 11th October (3 eggs)

Breeding Summary:

This pair bred here together for their first breeding season last year, and successfully raised three chicks. This year there were no sightings of the pair on the first two visits to the box during September and October, although there was a scrape repeatedly made in the substrate. By a visit on 22nd October however, three eggs were being incubated, and interestingly, on a subsequent check on 12th November the male was found to be incubating the clutch. A visit on 20th November found two chicks of four days old, and one remaining egg. These two chicks were ringed on 10th December, and were still healthy, and ready to fledge at the following box visit on 17th December. A visit in early January found the site empty, with no secondary breeding attempt.

Chicks: 5A12332 – Dark Blue / Brown (L); ID (R)

5A12334 – Orange / Dark Green (L); ID (R)

12) Owen's House (OH)

Female: Red / ID (L); Yellow (R)

IRN: 5A04701 (wild hatched from Mount Camizard 5 in 2004/05)

Male: Black / Brown (L); ID (R) (previously Dark Green (L); Light Green / ID (R))

IRN: 5A04583 (wild hatched from Domaine du Chasseur 8 in 2004/05)

First egg date (and clutch size): Approximately 5th October (3 eggs)

Breeding Summary:

This pair have been breeding together here for three previous seasons and last year were utilising the top-most nest box near to the house. This year, the pair are using the lower box. The pair were identified clearly on a visit on 4th October, however it was later in the season that the male lost his light green colour ring and so he was trapped and re-rung on 12th November.

Three warm eggs were found in the nest box during a check on 22nd October, and all of these hatched into chicks, which were found on 12th November aged at about five days. All three were ringed on 27th November at eighteen days old and they all fledged successfully, being seen in the vicinity of the box on 17th December. They were still around in early January, receiving food from the male parent, and there was no recycle attempt evident.

Chicks: 5A12302 – ID (L); Black / White (R)

5A12303 – ID (L); Brown / Dark Blue (R)

5A12304 – ID (L); Brown / Orange (R)

13) Titmalot (TT)

Female: ID (L); Light Green (R)

IRN: Unconfirmed

Male: Unrung

IRN: -

First egg date (and clutch size): Before 5th November (3 eggs)

Breeding Summary:

The cavity was first accessed on 13th November following sightings of the above the forest and food passing in the canopy in the vicinity of the previously used Titmalot tree (from the 2005 season). The first tree accessed found the cavity occupied by a well-fed white-tailed tropicbird chick, and the kestrel activity was identified as being in the adjacent tree. Three warm eggs were found in a particularly hard-to-access small cavity above a fern in the upper branches of the tree. When we returned to check the cavity a second time, the eggs had been lost, with only a few fragments remaining, which were too small to determine whether they had hatched or been predated. Watches in December and January failed to find any further breeding activity in the area.

14) Black Bowl (BB)

Female: Light Blue / Yellow (L); ID (R) (previously Pink / Yellow (L); ID (R))
IRN: 598606 (wild hatched from Vallée de l'Est in 2001/02)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 20th – 28th October (1 egg)

Breeding Summary:

This female was breeding here last season, although at the time her identity could not be revealed because she wore a faded colour ring. This season she was trapped in the nest on 20th November, and the faded pink colour ring was replaced with a light blue ring. Unfortunately after this event there was no further incubation of the egg, and the breeding attempt was abandoned. Whether this was due to the trapping or not is unclear, however, a single egg clutch does not suggest a particularly fertile pairing.

The egg was first discovered on 28th October in the cavity used by the pair last year. During visits to the site earlier in October, the pair had been seen food passing, and a third kestrel was often present and interfering with the partnership. Repeated territorial manoeuvres were made by the resident pair. By the 2nd December however a parallel watch found the breeding attempt to have been abandoned. The pair were still present, but were no longer involved in the nest, and a subsequent watch on 10th December, and visit to the nest on 24th December, found that there was no further breeding attempt made there.

FERNEY

15) Ferney 1 (FE1)

Female: Light Blue / ID (L); Red (R)
IRN: 5A04702 (wild hatched from Mount Camizard 5 in 2004/05)

Male: ID (L); Brown / Dark Green (R)
IRN: 598397 (wild hatched from Ferney 5 in 2001/02)

First egg date (and clutch size): Clutch 1: Between 10th and 20th September (4 eggs);
Clutch 2: Between 8th and 12th December (3 eggs)

Breeding Summary:

This is a new pairing for this site, with the trained female from last year being usurped by this four-year old who has been breeding at Ferney 6 the last three years. The male comes here for the first time after breeding for the prior two years at Ferney 5, and before that, four years at Ferney 8. The female had a tendency to dust- and sunbathe on the concreted track above the restaurant as it winds upwards towards Mount Camizard. She was observed doing this on a number of occasions.

An initial check on the site in early September did not reveal any signs of use by breeding kestrels, however a subsequent check on 30th September revealed a clutch of four eggs being incubated by this female. There was some confusion over her identity since she was wearing partially faded grey and red colour rings. By a visit on the 26th October, two of the eggs had hatched, with two infertile eggs remaining. By a check on 4th November only one of these chicks remained, and it was not until 18th November, when the chick was about twenty-six days old, that it was deemed healthy enough to ring, since it had appeared malnourished up to that point. However the chick fledged successfully, being seen in the canopy of the box tree on 4th December, and although not seen on a subsequent check in December, the female had already re-laid and was in the process of incubating, a clutch of three new eggs. She was still incubating these on 19th January, although they were not very warm, and it was unlikely that they would become viable offspring.

Chicks: 5A09736 – ID (L); Light Blue / Dark Blue (R)

16) Ferney 2C (FE2c)

Female: Unconfirmed
IRN: -

Male: Unconfirmed
IRN: -

First egg date (and clutch size): Before 27th September (3 eggs)

Breeding Summary:

The pair remained elusive for identification throughout the time they were present at the nest box. Their nesting attempt had failed before identities could be obtained, and they did not return to the site for the rest of the season, although distant sightings of kestrels within the territory were made later in the season.

The first visit to the site found little evidence of use, save for a scrape in the substrate. By the second visit on 3rd October, the female was incubating three eggs and the pair were seen copulating in a nearby tree. However by 4th November only two eggs remained in the box, and they were cold. Some remains of the third egg were found, and it appeared to have been

predated in the box, which may have scared off the female. There was no more use of the nest box by kestrels for the rest of the season.

17) Ferney 3 (FE3)

Female: ID (L); Grey / Orange (R)
IRN: 5A09730 (previously unringed)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 23rd October (3 eggs)

Breeding Summary:

This is a completely new pairing at this site, replacing a female that had bred at the site since 2001. The new female was unringed, and was trapped on the eggs on 4th November and given a set of colour rings. However, the nest was abandoned after this point, suggesting that whilst she had been incubating her eggs for about five days, this did not represent enough investment in the breeding attempt for her to remain after the stressful intrusion. Whilst other factors maybe responsible, this is most likely since she had already abandoned her incubation by the time the nest was checked just the following day.

The nesting attempt at this site was late in beginning, with checks throughout September and much of October finding only a scrape in the substrate and food passes between the pair. Two partially incubated eggs were finally found on 28th October, and by the time of trapping the female on 4th November, this was a clutch of three eggs. The following day, these eggs were cold, and the pair were nearby, but no longer interested in the nest. After the eggs were removed, the pair did not return and the box was repeatedly occupied by Indian mynahs.

18) Ferney 4 (FE4)

Female: Black (L); Grey / ID (R)
IRN: 5A09689 (wild hatched from Mount Camizard 5 in 2007/08)

Male: Grey (L); Orange / ID (R)
IRN: 5A04772 (wild hatched from Ferney 2C in 2006/07)

First egg date (and clutch size): 27th September (4 eggs)

Breeding Summary:

This is a new pairing at this site with birds that have not bred before. The site was unoccupied for the majority of last season after the incumbent pair moved to Ferney 14 when bees took over the box. The male was missing a grey colour ring and was trapped on 14th November so that the missing ring could be replaced.

The kestrels were already present and food passing at the box at the first visit on 21st September. The following check on 1st October revealed two cold eggs in the box, which had increased to four by 9th October. By a check on 26th October the clutch had been reduced to three eggs, and two of these were found to have hatched on a visit on 27th November. The two were ringed on 4th December, at about nineteen days old, and were found healthy and ready to fledge on 14th December. Following the fledging, the family seemed to vacate the site, with little evidence of use upon subsequent visits in January.

Chicks: 5A12326 – ID (L); White / Red (R)
5A12327 – ID (L); Yellow / Dark Blue (R)

19) Ferney 5 (FE5)

Female: ID (L); Black (R)
IRN: Unconfirmed

Male: Unconfirmed
IRN: -

First egg date (and clutch size): Clutch 1: 26th October – 1st November (2 eggs)
Clutch 2: 3rd – 7th February (2 eggs)

Breeding Summary:

The documented breeding behaviour at this site was unusual. The female is missing a colour band and could not be identified, and the first breeding attempt failed before the male's identity could be determined. However, at the end of the season during a maintenance visit, two cold eggs were found, that had been laid in a short interval between box checks, despite repeated visits during the season uncovering no signs of a pair present.

The first checks of the season found signs of use by kestrels, with many mutes under the box entrance and a scrape in the substrate. Finally, at a check on 3rd November, the female was found in the box incubating two eggs, but by 18th November these were cold. A check on 8th December found the female present in the box entrance, sheltering from heavy rain, and at a check on 3rd February the box remained empty. Finally, when some maintenance to the box structure was carried out on 10th February, two cold eggs were found inside, although no kestrels were sighted whilst the repair work was conducted.

20) Ferney 6 (FE6)

Female: Grey (L); Black / ID (R)
IRN: 5A04791 (wild hatched from Ferney 12 in 2006/07)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 8th October (3 eggs)

Breeding Summary:

This is a new pairing at this site, with the female breeding for the first time at the age of two. The female was missing a colour ring and was trapped on eggs at twenty days into incubation and re-rung with her original combination. The male is also new to the site, as the partial and unconfirmed colour combination differs to that of last year's male. This breeding attempt is one of only four this year in which ringed chicks did not survive to fledge. The reason is unclear since there were no remains in the box and the chicks had appeared healthy although slightly under-developed for their age when they were ringed. There had been several days of heavy rain in the week preceding ringing, and that following, which could have resulted in a lack of food available for the developing chicks.

At the beginning of the season the nest box contained an old Indian mynah nest, and was very rotten. It was thus replaced on 30th September, and while doing so a young adult kestrel arrived in the tree. This was subsequently found to be the female of the pair. The male was partially identified on a number of occasions, but the definite identity of the bird remains unknown. By 16th October, three warm eggs were found in the new box, and by a visit on 27th November two were found hatched as 12-15 day-old chicks. These were ringed on 4th December but by a check on 16th December the chicks had vanished – and a white-tailed tropicbird was inside the box. Nearby three kestrels were interacting, with a foodpass between two individuals and rapid flying from tree to tree before heading down into the central valley. The behaviour was akin to display flying between a pair with an additional interested

adult. A check in early January found the box empty except for a potential scrape in the substrate, and no other evidence of use by kestrels.

Chicks: 5A12324 – ID (L); Red / Grey (R)
5A12325 – ID (L); Red / Red (R)

21) Ferney 7 (FE7)

Female: - / Dark Blue (L); ID (R) – missing Dark Green over the Dark Blue
IRN: 5A09700 (wild hatched from Vallée de l'Est in 2007/08)

Male: Black (L); ID (R)
IRN: Unconfirmed

First egg date (and clutch size): 16th – 22nd October (3 eggs)

Breeding Summary:

This is a new pairing at this site with the female breeding for the first time in her first year. Whilst she is missing a colour ring, her identity was secured at a visit on 6th November when her IRN could be partially read where she perched. The male also lacks a colour ring, but efforts to trap him with a baited trap proved fruitless.

The box was very rotten when the first check on the site was made in September, and it was replaced on 30th September. The male was present during the maintenance, eating a *Phelsuma* gecko. By the 9th October the female was present and had made a scrape in the substrate of the nest, but it was not until a visit on 29th October that three warm eggs were discovered in the box. On 27th November, one of the three eggs was found to be pipping but by the next visit on 16th December the box was empty, with nothing but a fragment of hatched eggshell. A few old mutes remained below the box, but the area was otherwise devoid of kestrel signs. A check in early January found the site still unused.

22) Ferney 8 (FE8)

Female: Yellow / ID (L); - (R)
IRN: Unconfirmed

Male: Dark Green / ID (L); Dark Blue (R)
IRN: 5A04751 (wild hatched from Ferney 9 in 2005/06)

First egg date (and clutch size): 29th September (4 eggs)

Breeding Summary:

This is a new pairing with the male breeding for the first time at the age of three. The female maybe last year's bird missing an orange colour ring, but there was no confirmation of this.

The pair were present at the first check on 20th September, and by the 1st October there was a single cold egg in the box. By the 9th October the full clutch of four eggs had been laid and were being incubated. One of the four eggs was found to be pipping on 3rd November and a check on 6th November found three chicks of about two days old, and one remaining egg. These were all ringed on 1st December at 25-27 days old, and were seen healthy in the box a few days later, presumably to fledge successfully in a few days. Checks in January found the box still in use by the family, as evidenced by the mutes and feathers around, but by a maintenance visit in February there was no longer any sign of kestrels present.

Chicks: 5A12311 – ID (L); Brown / Black (R)
5A12312 – ID (L); Brown / Light Blue (R)
5A12313 – ID (L); Dark Blue / Yellow (R)

23) Ferney 12 (FE12)

Female: Pink / Orange (L); ID (R)
IRN: 598611 (wild hatched from Mount Camizard 5 in 2001/02)

Male: Dark Blue / Yellow (L); ID (R) (previously - / Dark Green (L); ID (R))
IRN: 5A04573 (wild hatched from Ferney 7 in 2004/05)

First egg date (and clutch size): 2nd October (4 eggs)

Breeding Summary:

This pair are breeding together for the first time at this site. The female breeds for the first time at the age of seven – a particularly advanced age of first breeding suggesting she may have bred undocumented previously. The male is likely to be the same as last year, although he went unidentified because of the missing colour ring. He was trapped this season on 14th November using a baited trap and refitted with a new colour combination.

The pair were foodpassing and copulating in the clearing at the first visit on 21st September, and by 3rd October there was a single egg laid. The following visits on 9th and 26th October revealed three and four eggs, respectively. The day the male was trapped, four chicks were discovered hatched, at about four days old. Only three remained to ring on 4th December and all three were found fledged on 19th December. There was no secondary breeding attempt and the fledglings were still in the vicinity of the box during a visit in early January.

Chicks: 5A12321 – ID (L); Red / Light Blue (R)
5A12322 – ID (L); Red / White (R)
5A12323 – ID (L); Red / Yellow (R)

24) Ferney 14 (FE14)

Female: ID (L); Red (R)
IRN: Unconfirmed

Male: Dark Green (L); Dark Green / ID (R)
IRN: 5A04621 (wild hatched from Ferney 2A in 2003/04)

First egg date (and clutch size): Clutch 1: 18th September (4 eggs)
Clutch 2: 18th December (3 eggs)

Breeding Summary:

Whilst the female had lost one of her colour rings, it is likely that she is the same female that was breeding with this male last year at this box, and has lost her light green colour ring. However, she could not be trapped this season to confirm this. If this is the same pair, they have been breeding together at Ferney 4 since 2005, but moved to Ferney 14 mid-season last year after bees took over the nest box. However the pair were seen back at Ferney 4 at the end of last season, although this year they return here to Ferney 14, and a new pair have taken up residence at Ferney 4.

By the first visit on 21st September, after the long rains, there were already two cold eggs in the box, which had been laid onto the bare floor since the substrate had spilled forwards. The pair were heard nearby. A return visit was made a three days later to add some substrate carefully below the eggs. There were still two cold eggs present. Interestingly, by 30th September, the female had laid a further two eggs, and all were being incubated. By 28th October there was still no sign of any of the eggs hatching, although the one egg had been lost since the last check on 6th October. A bad smell emanating from the box suggested that this egg may have been cracked and spilled during incubation, then been subsequently pushed out of the nest by the female. The nest was visited again on 3rd November, by which time one of the eggs had hatched, and a chick of three to four days old was present. The two remaining eggs appeared to still be being incubated. These had still not hatched by 5th November, and were collected. The single chick was ringed on 24th November at about twenty-six days old, and when the nest was checked on 1st December, it was seen healthy and ready to fledge in a couple of days. The pair began a recycle attempt in December, with a single cold egg found in the nest on 19th December. By the 29th December there three eggs being incubated and the fledging was flying around in the vicinity of the box. The female was also present. By the end of January however, this second attempt had been abandoned, and the three eggs were cold in the box. The female was still present in the box tree, but she was no longer aggressive.

Chicks: 5A09747 – ID (L); Black / Yellow (R)

25) Hole in Tree (HT)

Female: Yellow / Light Green (L); ID (R) – missing all colour rings by end of season
IRN: 5A09723 (wild hatched from Ferney 14 in 2007/08)

Male: Pink / ID (L) White (R)
IRN: 5A04750 (wild hatched from Ferney 4 in 2005/06)

First egg date (and clutch size): 29th September (4 eggs)

Breeding Summary:

This is a new pairing, and both birds are breeding for the first time. The cavity is a newly discovered natural breeding site, located in a lone-standing tree in a grass patch en-route to Ferney 13 and 14 boxes. It is very close to the chase gate that separates this part of the chase from the central valley of sugarcane. The cavity itself has a very small circular entrance, barely large enough to fit a hand in, and rather dark to inspect.

The nest site was discovered on 30th September when the male of the pair flew across the clearing with prey and alighted in the tree. The female was already in the tree and copulation was observed. An opportunistic inspection of the visible hole found a single egg inside. Both members of the pair were clearly identified. By a follow-up visit on 6th October the clutch size had increased to three cold eggs and the pair were present and food-passing. By 16th October the clutch had grown to four eggs, now apparently being incubated although the female wasn't in the cavity at the time. A visit on 28th October found the female inside the cavity, incubating the eggs. A check on the 18th November failed to locate anything in the cavity, and meanwhile the female was mobbed by mynahs, which seemed to be particularly prevalent around the tree on most visits. However, on 24th November an inspection of the cavity found two chicks hiding at the back, barely visible in the gloom, and a single remaining egg. There was, in addition, a pink colour ring inside the cavity. The chicks were removed with some difficulty, since the entrance was almost too narrow to reach an arm in to the back and remove a chick. Although they had quite a few mites, both chicks were healthy and were ringed. The female had by this point lost all her colour rings – possibly through her altercations with mynahs. The male was seen briefly, still with his pink ring, and so the source of the pink colour ring in the cavity is a mystery. It is therefore likely that this cavity has been used before by kestrels. By the 4th December the chicks were ready to fledge and remained in the cavity. The large amount of wash down the front of the tree trunk clearly indicated the presence of the cavity from a distance. By 29th December however these mites had worn away and there were no longer any signs of the family.

Chicks: 5A09748 – ID (L); Black / Brown (R)
5A09749 – ID (L); Black / Black (R)

26) Mount Camizard 1 (MC1)

Female: Dark Green / Dark Green (L); ID (R)
IRN: 5A04570 (wild hatched from Ferney 1 in 2004/05)

Male: ID (L); Grey / Red (R) (previously Purple / ID (L); Pink (R))
IRN: 5A04741 (wild hatched from Etoile 2 in 2005/06)

First egg date (and clutch size): Clutch 1: 23rd September (4 eggs)
Clutch 2: 22nd December (3 eggs)

Breeding Summary:

This female returns to this site after a year's absence during 2007/08 season in which she was not recorded as breeding. She had bred here in 2006/07 and before that bred a season at Le Vallon 9. The male bred here last year with an unconfirmed female bearing a missing ring, who was at the time suspected to be this female since the remaining combination corresponded with hers. This year the male remains at this site, and breeds with the returning female. The male was trapped and re-rung with a new combination on 6th November since the colour rings he was wearing had faded considerably.

The first visit to the box on 10th September found the female present, and attacking, although the box contained an old mynah nest and there were not yet any eggs. The female maintained this highly aggressive behaviour throughout the season, attacking visitors both on the ground and on the adjacent hunting chair. By the next visit on 30th September there were three cold eggs in the back of the box, and the female was again present. A bird, assumed to be the male, arrived in an adjacent tree and was deemed to have a single dark colour ring on his left leg. The identity of the male was made on a subsequent visit, and since this had no bearing with a dark colour ring on the left leg, it is possible that the bird seen on this occasion could be last year's female, attempting and failing, to intrude on the current breeding pair.

The following check on 3rd October found four eggs being incubated, with the female resistant to leaving the box when it was inspected. By a visit on 3rd November a single chick had hatched and was about two or three days old. The other three eggs remained unhatched. This chick was then ringed on 24th November at about twenty-three days old. It was healthy and not yet fledged on 3rd December. Following this successful breeding attempt, the pair began the process of recycling almost immediately after the chick had fledged, with a new scrape found in the substrate of the nest on 19th December, and a single egg laid by 23rd December. By the 3rd January this had increased to a clutch of three warm eggs, and the fledgling was seen sitting near the box, although the parents were absent. By the 31st January the pair had given up on the recycle attempt, and the three cold eggs were removed. The nest box was replaced on 11th February.

Chicks: 5A09746 – ID (L); Light Blue / Dark Green (R)

27) Mount Camizard 2 (MC2)

Female: Orange (L); Light Green / ID (R) (faded orange ring)
IRN: 5A04521 (wild hatched from Mount Camizard 5 in 2002/03)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): None laid

Breeding Summary:

At the first visit on 10th September the female was identified and the pair were seen briefly copulating near to the nest site. A scrape in the substrate of the box and some pellets and feathers in the back of the box showed it to be in use by the pair. By the 1st October there was another scrape in the substrate, but still no eggs laid, although the female was again present. There were no further signs of use as a nest by the next inspection on 9th October, although mutes below the entrance of the box suggested at least one of the pair was still present. More coral sand substrate was added to the box and on 12th October two new structural supports were added to secure the box. Throughout the season there were occasional fresh mutes below the box entrance, although Indian mynahs began to occupy the box. Several watches within the MC2 area proved fruitless in locating a breeding pair for this territory. An additional new nest box was added in the woods lower in the valley in the location of an old nest box for this site. There were several mutes scattered on the ground in the vicinity of this old box, and so it is likely that the woods are used frequently by kestrels anyway. At the time of replacing the old box (which was deemed unusable for kestrels at a check on 6th November), a white-tailed tropicbird was found to be nesting inside, incubating an egg. It was removed, and the new box was put up.

28) Mount Camizard 4 (MC4)

Female: ID (L); Black / Orange (R)

IRN: 5A09663 (wild hatched from Camizard Cliff in 2006/07)

Male: Dark Green / ID (L); Red (R)

IRN: 5A04725 (wild hatched from Etoile 9 in 2005/06)

First egg date (and clutch size): Approximately 26th September (4 eggs)

Breeding Summary:

The birds in this pair are recorded breeding for the first time. However last year a breeding attempt at this site went undocumented, and it is possible that this pair were here last year, particularly considering their early laying date.

The first visit to the site on 10th September found the box empty with no sign of kestrels using the site. However this was proved false when at the next, somewhat delayed inspection on 26th October, four warm eggs were found in the nest. The female had been inside incubating until the box was opened, and the pair were present and clearly identified during the visit. By the 5th November one egg had hatched into a two-day old chick, with one of the eggs still pipping. The other two eggs remained and showed no signs of hatching. By the 18th November there were two healthy looking chicks in the nest, one remaining egg, and one partially-trampled egg. The chicks were ringed on 27th November at the age of 22-24 days. They were still in the nest on 3rd December at about 28-30 days old, and ready to fledge. The last check of the site found the pair present and food-passing, but without a secondary clutch of eggs.

Chicks: 5A12305 – ID (L); Brown / Yellow (R)

5A12306 – ID (L); Brown / White (R)

29) Mount Camizard 5 (MC5)

Female: ID (L); Yellow / Red (R) (previously ID (L); Grey / Purple (R))

IRN: 598395 (wild hatched from Ferney 5 in 2001/02)

Male: Red (L); ID (R)

IRN: Unconfirmed

First egg date (and clutch size): 29th September (4 eggs)

Breeding Summary:

Since the male is missing a colour ring he cannot be confirmed as the same male that has bred here for the past five seasons with this female, with potentially a missing light blue ring on his right leg. The early and successful breeding attempt would suggest that this is possible, although the male refused to be tempted by a baited trap on the several occasions that this was tried. The female was accidentally caught while the trap was set for the male on 16th December, and so she was re-rung with a new, more readily identifiable colour combination. On the same trapping occasion a third kestrel, 5A09695 (L); Black / Dark Blue (R), wild hatched from Owen's House in 2007/08 was also accidentally trapped. The bird was big enough to be a female, but no morphs were taken since there was pressure to re-set the trap to tempt the incoming male. Once released, the intruding kestrel flew directly towards the box, where she was immediately chased off by the incumbent female.

The first visit to the box was on 10th September and although the box was empty the female was present, and by the second check on 1st October, there was a single cold egg in the box, and the female was attacking with vigour. A follow-up check on 9th October found the full clutch of four eggs being incubated by the female. A check on 6th November found that some

of the chicks had hatched, but were being concealed by the female who would not leave the back of the box. By 18th November there were four chicks in the box, with one distinctively smaller and less developed than the others. However all four were ringed on 27th November and whilst the runt remained smaller than the others, all were in good condition at about 22-23 days old. They were still in the box on 3rd December at about 28-29 days old, and had a lot of down feathers remaining, thus were probably a way off from fledging. However by 20th December they had in fact all fledged successfully and were perched together on a nearby branch. After this there were no further observations of the family in January, and the box remained empty and with no signs of use.

Chicks: 5A12307 – ID (L); Dark Blue / Dark Green (R)
5A12308 – ID (L); Dark Blue / White (R)
5A12309 – ID (L); Dark Blue / Brown (R)
5A12310 – ID (L); Dark Blue / Red (R)



The four MC5 fledglings seen near to the box on 20th December 2008. By comparison, this was the sum total of the entire wild Mauritius kestrel population in 1974.

Photo: S. Cartwright.

30) Camizard Cliff (CC)

Female: Purple / ID (L); Dark Blue (R)
IRN: 5A04738 (wild hatched from Mount Camizard 5 in 2005/06)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): Approximately 29th September (3 eggs)

Breeding Summary:

The female has been breeding here in the same cavity for the last two seasons. Her purple colour ring is somewhat faded but still currently distinguishable as its actual colour. The male could not be identified despite repeated watches throughout the season, since he avoided perching in the vicinity of the nest.

The first visit on 17th October found three warm eggs already in the cavity. A watch from the cliff on 11th November established that chicks had probably hatched since the male would bring food directly to the nest at ten-minute intervals. An abseil on 14th November found three chicks in the cavity. Two of the chicks were just old enough to ring at 11-12 days old, but one remaining chick needed to be ringed at a later interval when it was a little more developed since it looked to be about nine days old. This last chick was ringed on 21st November, and the other two were still present and healthy. It can be a little challenging to remove the chicks from this cavity to ring since the cavity has a narrow entrance but is very deep, with multiple

levels and entrances. In the past a retractable fishing rod with a noose of fishing line has been successful in noosing the leg of a chick to remove it. However, a guava pole with a small hook on the end is also useful, and the pole remains in vegetation next to the cavity should it be needed.

A cavity check on 2nd December found the three chicks inside, not far from fledging. A watch on 3rd January found the nest site still in use, with the pair visiting the cavity. This prompted a final visit to the cavity on 15th January, but although there were fresh mutes, it was empty and the only sign of a kestrel was at the beginning of the abseil when a single individual flew directly past the cliff face.

Chicks: 5A09739 – ID (L); Orange / Dark Green (R)
5A09740 – ID (L); Grey / White (R)
5A09737 – ID (L); Light Blue / Yellow (R)

31) Ferney Cliff (FC)

Female: ID (L); Black (R)
IRN: Unconfirmed

Male: Purple / ID (L); Dark Green (R)
IRN: 5A04727 (wild hatched from Ferney 10 in 2005/06)

First egg date (and clutch size): Approximately 11th October (unknown clutch size)

Breeding Summary:

This is an all-new nest territory, previously suspected as a roosting area or potential nest site, but hitherto undetected. There are a number of usable cavities in this cliff face, and the pair were in all likelihood using several as roosts and eating platforms since there were mutes at several cavities. The cavity in use is very small, barely large enough for fully grown fledglings to move about in, and is accessed from the large flat exposed area of cliff above. It is probable that this is not the first year that this site has been occupied by kestrels, since a number of unringed birds turn up in the population in this locality, such as this year's Ferney 3 breeding female. The site is accessed from le Vallon, by ascending the cutting near Le Vallon 6, and bearing left up to the boundary fence with Ferney. Beyond this fence a slight track through the guava leads past several exposed bluffs with a clear view of the valley, and eventually can be followed down through mixed ebony, guava and privet forest to the edge of the breeding cliff.

A watch from a bluff bordering le Vallon on 18th November detected a kestrel flying past regularly with prey items down into the valley between Ferney 10 and Ferney 4. The watch was taken closer to this area, and the pair were seen interacting near to an area of exposed cliff further into the valley. The base of this area of cliff was inspected and two halves of hatched eggshell were found on the ground. The site was revisited with access ropes, and eventually the nest was found, containing two chicks of three to four days old. Both adults were identified, but the female was missing a colour ring. The chicks were both ringed on 9th December at about twenty-three days old, and when revisited on 18th December, were both still in the cavity and ready to fledge. A final check on the cavity on 9th January found the cavity empty, and although there was torrential rain, there was a food pass heard nearby, but no further signs of activity.

Chicks: 5A12330 – Light Blue / Brown (L); ID (R)
5A12331 – Light Blue / Orange (L); ID (R)

LE VALLON

32) Le Vallon 6 (LV6)

Female: ID (L); Orange / Black (R) (orange ring faded)
IRN: 5A04781 (wild hatched from Riche-en-Eau 13 in 2006/07)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): Before 5th October (2 eggs)

Breeding Summary:

This is the only box active this season in le Vallon, since all the other breeding attempts occurred in cliff cavities. The female is recorded as a first-time breeder at the age of two. The male was not fully identified by the time that the breeding attempt failed and despite repeated visits to the site, there was no recycle attempt by the pair.

The first visit on 6th October found the male arrive with a *Phelsuma* gecko, which he consumed himself since the female did not appear. She was in the nest box when it was checked, as were two cold eggs. There was an almost non-existent scrape in the substrate, on which the eggs had been laid. The female's orange colour ring had faded. By the second visit on 17th October the eggs had unfortunately been predated and there was an abundance of rat droppings on the box and adjacent branches. The eggshell remains were collected. There were no kestrels present and on subsequent visits throughout the season no kestrels were ever observed near the site, although there would occasionally be fresh mutes below the box entrance and signs of a scrape in the substrate.

33) Undetected (UD)

Female: Red / Dark Blue (L); ID (R)
IRN: 598615 (wild hatched from Petit Parc in 2001/02)

Male: White / Red (L); ID (R)
IRN: 5A09671 (wild hatched from Ferney 4 in 2006/07)

First egg date (and clutch size): Clutch 1: Approximately 5th September (4 eggs)
Clutch 2: 19th – 27th December (1 egg)

Breeding Summary:

This is the same pairing as last year. The male breeds here for his second year, whilst the female has been breeding here for five seasons. This pair are responsible for the earliest documented laying this season.

The site was visited on 27th September, and last season's nest site, which can be accessed without ropes, was checked and empty. When the site was revisited with access ropes on 14th October, two chicks of about four days old, and two remaining eggs were found in the large lower cavity. These two chicks were ringed on 7th November at the age of 24 – 26 days, and considering the late age of ringing, were assumed to have survived to fledge. By 11th January, a single cold egg was found in the same cavity, and although a kestrel was in the vicinity of the nest site, there was no interest in the nest at all. The egg was candled and appeared to be infertile / undeveloped.

Chicks: 5A09731 – ID (L); Grey / Black (R)
5A09732 – ID (L); Grey / Dark Blue (R)

34) Powerstation Cliff (PSC)

Female: Light Green / Yellow (L); ID (R)

IRN: 596325 (wild hatched from Powerstation Cliff in 1996/97)

Male: ID (L); Dark Green / Dark Green (R)

IRN: 5A04534 (wild hatched from Undetected in 2004/05)

First egg date (and clutch size): Before 17th October (2 eggs)

Breeding Summary:

The female is an exceptionally old breeding individual having bred for ten years at Champagne Cliffs, and for one year at Riche-en-Eau 9, back in 1997. Her success in breeding attempts is sketchy, with recent years not producing any fledglings, although last year the pair raised a single fledgling. In total she has reared eleven chicks to fledge over the years. This pair have been breeding together for three seasons, although previously they have always bred at the adjacent Champagne Cliffs. Powerstation Cliffs were last occupied by a pair in 2006, at the same time as this pair were in residence at Champagne Cliffs. Both the 2006 pair and this year's pair used the large 'amphitheatre' cavity. This year there was no evidence of any kestrel nesting attempts in the various cavities on Champagne Cliffs so the reason for the move is unclear, particularly since last year's breeding attempt there raised a fledgling.

The first sign that this site was active was on 27th September when a kestrel call was heard from near the cliff face, and a foodpass was made nearby. A watch on 7th October proved indeterminate, and it was not until a parallel watch on 17th October that there were further clues that the cliff was in use, with signs of a kestrel flying into trees adjacent to the cliff face. On 21st October after a number of abseils to different cavities on the cliff face, the male was seen flying in with prey, and passed it to the female at the entrance to the 'amphitheatre' cavity in the centre of the cliff face. There were two warmish eggs right at the back of one of the large cavities and it was necessary to detach from the abseil ropes in order to walk into the back of the cavity. The two warm eggs were still present when the cavity was accessed on 2nd November, and a watch on 19th November deduced that the female was still incubating the eggs. However a visit to the cavity on 5th December found only a single cold egg in the cavity with signs that the other had been predated. The female was still in and out of the cavity, apparently uncertain whether to incubate the egg or not. The egg was still there on 15th December, and the pair were not present. A final watch on the site in mid January found no signs of the pair, although a single bird flew non-committally past the cliff.

35) Chimney Cliff (CYC)

Female: Dark Green / ID (L); Pink (R)

IRN: 5A04769 (wild hatched from Mount Camizard 5 in 2006/07)

Male: Light Green / ID (L); Pink (R)

IRN: 5A04758 (wild hatched from Scotsman's Drop in 2005/06)

First egg date (and clutch size): Clutch 1: Approximately 24th September (4 eggs)
Clutch 2: 19th December – 4th January (3 eggs)

Breeding Summary:

This is a new pairing for this nest site, with the female in just her second breeding season. She was observed last year paired up with a male in the vicinity of the Le Vallon 12 nest box, although no eggs were laid. The male bred here last year, successfully producing three fledglings.

When the nest cavity was first accessed on 14th October there was already a clutch of four warm eggs inside. The female had evacuated the nest when the abseil rope was thrown down. By a visit on 7th November two chicks had hatched and were already eight to nine days old. Both the male and female were present and identified. The two chicks were ringed on 24th November at about twenty-five days old and were in apparent good health. However during a visit just prior to the expected fledging period, the carcass of one of the chicks was found in the cavity. The chick appeared to be about twenty-six days old at death, but decomposition made it difficult to determine the cause of death. The other chick remained healthy and had moved to a smaller cavity away from the original nest which harboured its dead sibling. A watch on the nest site on 23rd December found the male and female both present, with the female repeatedly entering the cavity and remaining there for short bursts of time. A check on 11th January found a second clutch of three eggs, clearly being incubated, with the same pair present, and with the added bonus of the fledgling nearby. On 29th January the pair were still very attached to the nest, and remained present and vocal nearby while the cavity was checked. There were still three warm eggs in the cavity, but it was unlikely the clutch would be viable.

Chicks: 5A09744 – ID (L); Light Blue / Orange (R)

36) Kartoffelklotz (KK)

Female: Black / ID (L); Red (R)
IRN: 5A04628 (wild hatched from Petit Parc in 2003/04)

Male: ID (L); Dark Blue (R)
IRN: Unconfirmed

First egg date (and clutch size): 10th – 15th October (3 eggs)

Breeding Summary:

This is the same pair that bred here last year and which bred at Scotsman's Drop for the preceding three years. This season they are using a new cavity in the same area of cliffs. The cavity is much lower down the exposed rock area, and requires an abseil anchor point further up the slope of Pic Grand Fond. The cavity is concealed behind a small outcrop of vegetation and consists of a large main cavity (with the remains of a white-tailed tropicbird in this year) and a smaller secondary cavity, in which the kestrels were breeding.

On 14th October the cavity used by the pair last year was accessed, and was devoid of signs kestrel occupation. During a visit to Scotman's Drop on 15th October the pair were seen copulating in the vicinity of Kartoffelklotz. The old cavity was again visited on 2nd November, yet was still empty, and the nest was not found elsewhere on the cliff face during the visit. On 10th November another abseil attempt from an alternative anchor point subsequently uncovered the nest, with three warm eggs present. Both the male and female were present and protective over the nest. Both were identified clearly. A watch from below the cliff on 19th November provided clues that the pair were feeding chicks since the female brought food into the nest. So on 4th December the two chicks which had hatched since the last visit were ringed at 16-19 days old. On 15th December, when the chicks were 27-30 days old, a visit was made and found them both in the cavity and healthy. By a visit on 11th January the nest was empty and no kestrels were seen about. A final visit to the cavity on 11th February again found it to be empty, although fledgling 5A12329 was seen perched in a tree near the parking area between Chimney Cliff and Kartoffelklotz.

Chicks: 5A12328 – Dark Blue / Light Blue (L); ID (R)
5A12329 – Dark Blue / Black (L); ID (R)

37) Petit Parc (PP)

Female: - (L); ID (R)

IRN: 598269 (wild hatched from Riche-en-Eau 3 in 1999/00)

Male: Dark Blue / Purple (L); ID (R)

IRN: 598322 (wild hatched from Powerstation Cliff in 2000/01)

First egg date (and clutch size): Clutch 1: Before 7th October (3 eggs)

Clutch 2: 20th November – 1st December (2 eggs)

Breeding Summary:

The female has been breeding at this site for the last five years, although since 2004 she has had no colour rings, and in 2003 had only one colour ring. Her identity has never been confirmed through trapping. The male has been breeding here since 2001.

A paired watch on 8th October found the pair to be food passing on the cliff face, although there was no consistent behaviour focussed on a nest cavity. When last year's cavity was accessed on 13th October, the female was inside incubating three eggs. The female was identified, and the male was partially identified. A return visit to the cavity on 9th November found a white-tailed tropicbird incubating an egg of its own, and no sign of the kestrels' clutch. Some brief calling by a kestrel was heard further along the cliff face. A watch on 19th November deduced that the pair were still present and prospecting for a new nest in the same patch of cliff. A second watch on 24th November found the pair focussed on a cavity near to the original, with repeated visits made to the cavity. This was visited on 5th December, but was empty and full of cobwebs. The pair were heard foodpassing further along the cliff face and after an extended period of time trying to pinpoint their location, the female exposed the location of the new nest by flying into it after a long period sat perched. The new nest site was accessible without ropes, although a safety sling was advisable, and inside were two eggs, unreachable at the back of a long cavity. These were still in the cavity on 15th December, with the female nearby and watching, but by 11th January the eggs appeared to have been predated in the nest. One egg had been neatly punctured and drained, and the other was in fragments at the mouth of the cavity. There were no longer any signs of the pair being around.

ETOILE

38) Etoile 1 (ET1)

Female: ID (L); Grey (R) (missing light blue ring from left leg)
IRN: 5A04776 (wild hatched from Powerstation in 2006/07)

Male: Black / Red (L); ID (R)
IRN: 5A09670 (wild hatched from Etoile 9 in 2006/07)

First egg date (and clutch size): Approximately 23rd September (3 eggs)

Breeding Summary:

This pair were sighted last year at Etoile 3, although a breeding attempt never got underway at the site because a white-tailed tropicbird was nesting inside and in the latter stages of rearing a chick. Their documented pairing last year represented their first breeding attempt, and this year sees their second, together. Last season the female was documented as missing her left eye, however this year, it was apparent from close observation that her eye was not missing but severely infected and swollen. This female then had the interesting eventuality of being found dehydrated and lost in the village of Moka, in early February, some 18km away from her breeding territory. Once rescued and taken to the Gerald Durrell Endemic Wildlife Sanctuary, her infected left eye was removed and she is now being rehabilitated in captivity. In addition, the light green colour ring that she was identified as wearing last year was in fact a light blue ring, which this year was missing. She was identified in captivity from the IRN on the metal ring.

At the first visit on 11th September the male was in the box tree and identified whilst the female was high up in a tree nearby, sporting orange-stained chest feathers. There was nothing in the box, but by the next visit on 1st October the female was incubating three eggs. The male was present and re-identified and the female's left eye was clearly very swollen. The female was still incubating the eggs on 16th October although her eye infection seemed to have gotten worse. By a visit on 31st October the eggs had all hatched and three chicks were bundled up in the back of the box, sleeping. These were all ringed on 21st November, and although there was a noticeable runt in the litter, all chicks appeared healthy and were about 22-24 days old. When the nest was next checked on 3rd December, the two older chicks were present, but the runt could not be accounted for. It was only when checking the box in mid January that some remains of the youngest chick (5A09735) were found inside, including the identity rings still attached to a dismembered tarsus. Since the leg was detached from the rest of the chick and constituted the only remains present, it is possible that there was some picking at the carcass by the other two chicks while it remained in the box. The family had all departed by this latter visit in January and no recycle attempt had been made.

Chicks: 5A09735 — ID (L); Light Blue / Grey (R)
5A09742 — ID (L); Light Blue / Light Blue (R)
5A09743 — ID (L); Light Blue / Red (R)

39) Etoile 2 (ET2)

Female: Orange / ID (L); Light Green (R)
IRN: 5A04726 (caught as an adult at Etoile 2 in 2005/06)

Male: Unconfirmed
IRN: -

First egg date (and clutch size): 30th September (4 eggs)

Breeding Summary:

The female has been breeding at this site since 2003, although it was not until 2005 that she was trapped and ringed. Whilst the identity of her partner this year remains unconfirmed (since attempts to trap him this season proved repeatedly unsuccessful), it is possible that he wears faded colour rings and is the same male that has been breeding here with her since 2003.

At the first visit on 11th September, the box was empty, but the pair were in the tree and copulating. By 1st October there was a single egg in the box, and by 16th October this had increased to four eggs which were being incubated by the female. The pair were present and identified, although faded rings on the male meant this effort was of limited value. By a visit on 11th November three of the eggs had hatched with the fourth no longer present. Two chicks remained to ring on 3rd December at about twenty-two days old. These were both seen fledged on 16th December. Subsequent checks on the site in December and January found the box and area empty, with a few fresh mutes below the box entrance but no other signs of the family.

Chicks: 5A12319 – ID (L); Orange / Dark Blue (R)
5A12320 – ID (L); Red / Orange (R)

40) Etoile 5 (ET5)

Female: Unrung
IRN: -

Male: White / ID (L); Light Blue (R)
IRN: 5A04742 (wild hatched from Etoile 2 in 2005/06)

First egg date (and clutch size): Approximately 26th September (3 eggs)

Breeding Summary:

This is the first time this box has been recorded in use by breeding kestrels. It was rotated at the end of last season so that the mouth of the box did not face into the prevailing wind. It had not been in use last year and contained almost pristine coral sand substrate. The male is breeding here for the first time at the age of three, and the female is unrung, and apparently quite a young bird, probably in her first or second year.

When the box was first checked on 1st October there was a good deal of mutes below its entrance and the female flew into the tree, coming in very close, and watching with an aggressive posture. A check on 16th October interrupted a fracas between three kestrels. Two were unrung and the third alighted in the box tree after chasing off one of the unrung birds. It also departed before an identity could be established. On 26th October the unrung female was incubating a clutch of three eggs, and by 3rd December these had hatched, although were unexpectedly young. It was expected that the latest hatch date would be 24th November and yet there were two chicks of just one to two days old and a remaining egg. It was thought that the chicks would be twelve days old based on expected incubation periods. This demonstrates the occasional plasticity that can occur in the breeding schedule of wild

birds. By 16th December there were three healthy chicks in the box of 13-15 days old and these were all ringed on 23rd December at about 19-22 days old. A visit on 28th December found the chicks all in the box and ready to fledge, and by the final visit in mid January the family had moved on with no signs that the box was still in use.

Chicks: 5A12339 – ID (L); Yellow / Light Blue (R)
5A12340 – Brown / Black (L); ID (R)
5A12341 – Brown / Dark Green (L); ID (R)

41) Etoile 6 (ET6)

Female: Grey / White (L); ID (R)
IRN: 5A12344 (caught as an adult this year at Etoile 6)

Male: Pink (L); Black / ID (R)
IRN: 598291 (wild hatched from Etoile 3 in 1999/00)

First egg date (and clutch size): 7th November (3 eggs)

Breeding Summary:

The female was found this season as an unringed bird, and was trapped and ringed on 28th December using a noose carpet in the nest. She replaces the exceptionally old female who bred at this site for the previous four years with this male.

When the site was first visited at the beginning of October it was apparent that some tree maintenance had been in effect at the site. Many of the lower branches on the box tree had been sawn off, leaving the box itself exposed and reducing the available perches around the entrance of the box. However, it was apparent that kestrels were using the box, since there were fresh mutes on the ground below the entrance. The male was spotted on 16th October flying into the tree with prey and a scrape had been made in the substrate suggesting an imminent laying attempt. The female was finally spotted on 26th October at the box, but it was only on a visit on 11th November that two cold eggs were found in the nest. At this point the female had assumed aggressive behaviour towards intruders and would attack during inspection visits. She was incubating three eggs on 21st November and by 23rd December these had still not hatched and were no longer being properly incubated. Since she was still partially incubating them on 28th December, the opportunity was taken to trap her on the eggs, as they were probably infertile. The eggs were still in the box and had been abandoned when the site was next visited in mid January. The box itself was unstable in the tree since some of the support structure had rotted during the course of this particularly wet season. In early February the structure was replaced and the box was secured.

42) Etoile 9 (ET9)

Female: ID (L); Light Blue / White (R)

IRN: 5A09741 (previously 598396, wild hatched from Ferney 5 in 2001/02)

Male: Grey / Pink (L); ID (R)

IRN: 598358 (wild hatched from Le Vallon 6 in 2000/01)

First egg date (and clutch size): Clutch 1: Approximately 17th September (3 eggs)
Clutch 2: 21st November – 6th December (4 eggs)

Breeding Summary:

This pair have been breeding together at this site for the last four seasons. The female had lost all her colour rings this season and needed them replacing. She was trapped using a noose-hat technique which exploited her aggressive behaviour towards visitors. When she was in the hand it was apparent that her metal identity ring was crushed around her leg, potentially causing injury. It may have occurred during an altercation with a predator such as a mongoose since she was also missing talons and toes. The ring was replaced, as were the colour rings, and there was no apparent injury to the leg caused by the pinching metal ring. The male was identified early in the season and throughout the breeding attempt. However by mid January he had lost his grey colour ring, necessitating that he be trapped next season to re-ring.

The first visit on 11th September found no signs of kestrels at the site. However by the next check on 1st October there were already three warm eggs in the nest and both parents were present. A visit on 26th October found a single chick had hatched, whilst there were two remaining eggs. The chick was about four to five days old. The remaining eggs were collected at a visit on 3rd November, and the chick was ringed on 11th November at the age of twenty-one days. It was suffering from several bee stings since bees had begun to build a nest in the box, but these were smoked out before the chick was replaced in the nest. On 21st November the chick was much healthier-looking and ready to fledge, and at this point the female was trapped and re-rung. Surprisingly, the next check on 16th December revealed a new clutch of four eggs being incubated. By mid January this number has reduced to three, and the eggs were cold and so were removed. Both parents were present, as was the fledgling.

Chicks: 5A09733 – ID (L); Grey / Dark Green (R)



ET9 breeding female after her colour rings were replaced. The photo on the right shows the toe old toe injuries and the old metal identity ring which had overlapped and was crushing the leg.

Photo: S. Cartwright, November 2008

RICHE-EN-EAU

43) Riche-en-Eau 2 / Riche-en-Eau 4 (REE2 / REE4)

Female: ID (L); Orange (R)
IRN: Unconfirmed

Male: White / ID (L); Yellow (R)
IRN: 5A04598 (recorded unfledged from Riche-en-Eau 2 in 2004/05)

First egg date (and clutch size): Clutch 1: Approximately 25th September (3 eggs)
Clutch 2: 5th December (3 eggs)

Breeding Summary:

This female could not be identified since she is missing a colour ring. However, she replaces last year's female who was seen in the vicinity of the nest this year at the first visit. The male was also present at the time, but refused to pass her the *Phelsuma* gecko he was holding, and proceeded to call for his partner. The male bred here last year. Repeated colour identification on the male secured his identity as the presumed 'unfledged' chick from REE2 (in 2004/05) during the season.

The first visit to the site on 12th September found the male present with last year's female, but by 6th October the new breeding female was in the box incubating three eggs, and did not leave the box upon inspection. A follow-up check on 23rd October found there were still three warm eggs in the box and the pair were present and particularly aggressive, probably winning the prize this season for being the most consistently aggressive pair, regularly mobbing visitors whilst well away from the box tree. A visit on 3rd November revealed that two chicks, of about three days old had hatched, with one egg remaining. Unfortunately by 20th November the box was empty, and the box was crawling with ants, which may have been responsible for the chicks' deaths. The female was seen the same day in display flight near to REE4 box, and was subsequently found to have laid a second clutch of three eggs by 22nd December. Two of these had hatched by 12th January, and the male was also present during the visit. Unfortunately hopes for a late brood were dashed during a visit on 22nd January when the box was found to be empty with no more signs of kestrel presence. The REE4 box had previously had both a bees' nest and a rat nest earlier in the season and it is possible that the young chicks were predated. The site itself had not been used by kestrels since 2004.

44) Riche-en-Eau 3 (REE3)

Female: Purple / Brown (L); ID (R)
IRN: 596392 (wild hatched from Riche-en-Eau 3 in 1997/98)

Male: Orange / ID (L); Grey (R)
IRN: 5A04775 (wild hatched from Riche-en-Eau 3 in 2006/07)

First egg date (and clutch size): None laid

Breeding Summary:

The female had been breeding at this site for the last five years, and at eleven years old is one of the oldest breeders this season. She breeds here this season with a male, who breeds for the first time at the age of two.

There were signs that both boxes were in use by the pair from the mutes below the entrances and the protective behaviour exhibited at each box. However only one box repeatedly had a scrape in the substrate throughout the season, and despite this anticipated laying attempt, no

eggs were laid all season. The couple were also seen copulating and food passing and on one occasion on 6th October a third kestrel alighted in one of the box trees and left just as promptly. The pair were regularly present in one of the box trees, but by the last visit on 22nd January there was no longer any sign of the pair.

45) Riche-en-Eau 9 (REE9)

Female: Brown / White (L); ID (R) (previously Red / White (L); ID (R))
IRN: 5A09711 (wild hatched from Ylang Chasse in 2007/08)

Male: Grey / ID (L); Grey (R)
IRN: 5A04782 (wild hatched from Riche-en-Eau 13 in 2006/07)

First egg date (and clutch size): 22nd October (3 eggs)

Breeding Summary:

This pair are both breeding for the first time this year. The male of the pair has not travelled too far from his natal grounds, but the female arrives here from Ylang Chasse, a site at least 7 km away, having fledged as a member of the only four-chick brood last year. This nest site has not been in use since 2003, and this season the belated first visit on 23rd October found the box to be rotten and unusable. However, upon closer inspection there was a single cold egg in the back of the box and the young female in the tree, calling plaintively. The male also arrived although the disturbance caused by the visit prevented a food pass from taking place. The pair appeared particularly disturbed by the visit. It was apparent that the egg was at risk since the back of the box was rotten, and upon tapping it, the gravel began to leak out, drawing the egg out of a gap in the bottom of the box. The egg was carefully moved to a more secure position in the box, and the box was removed and replaced later the same afternoon. The timing of the visit had been lucky since upon returning to put up the new box, the egg appeared to be on its way out of the small gap between the panels, after it had been drawn down by the leaking substrate. Fortunately these incidents did not interrupt the female's laying and she had laid an additional egg by 25th October and was incubating the full clutch of three by 3rd November. She was trapped in the nest on 20th November, in order to re-ring her since she shared her combination with another young kestrel, and this did not appear to dissuade her from continuing her incubation. In due course one of the eggs had hatched and by a visit on 9th December a nine-day-old well-fed chick was in the nest. This chick was ringed on 22nd December and still appeared to be in good health. However, by the next visit to the box just prior to the expected fledge date, there was no sign of the infant. The previous day had witnessed a deal of rain and thunderstorms and there were no fresh mutes around the box entrance, suggesting that the site had not been visited by the pair in the previous twenty-four hours. By the last check in mid January there were new signs that the box was being visited by kestrels, but no signs that a late secondary breeding attempt had gotten underway.

Chicks: 5A12338 — ID (L); Yellow / Grey (R)

46) Riche-en-Eau 13 (REE13)

Female: Dark Green (L); Light Blue / ID (R)

IRN: 5A04582 (wild hatched from Riche-en-Eau 4 in 2004/05)

Male: Red / ID (L); Orange (R)

IRN: 5A04723 (wild hatched from Riche-en-Eau 3 in 2005/06)

First egg date (and clutch size): 22nd October (3 eggs)

Breeding Summary:

This pair bred here last year, producing a single chick with serious physical deformities that prevented it from ever fledging. It is a stark reminder of the physical consequences of inbreeding, since this pair are effectively brother and sister, but a year apart, both produced by the male 598270 and female 596392.

By the first visit to the site on 12th September there were signs that the box was in use but no kestrels were seen during the visit. It was not until 23rd October that a single egg was found in the box, and the female was seen nearby. An extra addition to the box was a large round stone, about one kilogram in weight, that had materialised since the last visit and was far too large to have been introduced to the box by a kestrel, or indeed, another other small animal. The only likely culprits were fruitbats, monkeys, or man. The stone was removed. By 3rd November the female was incubating three eggs and by 9th December at least one of these had hatched since a chick of eight to twelve days old was present and only one remaining egg. This single chick was ringed on 22nd December at about twenty-one days old and appeared in good health. An inspection of the box just prior to the chick's expected fledging period found it healthy and ready to fly. By mid January there were no longer any signs of the family and no recycle attempt had been made.

Chicks: 5A12337 – ID (L); Yellow / Yellow (R)

Appendix A – 2008/09 SUMMARY

A1 – Resightings

Breeding pairs this season and their respective nest sites: -

Pair No.	Site Code	♀	♂
1	KC	5A04645	Unconfirmed
2	BV3	598393	598224
3	ISC	UNRUNG	5A04575
4	BM	Unconfirmed	Unconfirmed
5*	DCCP	5A04762	5A09678 ^{\$}
6*	DC8	5A04800	5A04584
7	YY	5A04754	5A04798 [#]
8	YC	5A09734 [#]	Unconfirmed
9	YF	5A04594 [#]	Unconfirmed
10	ER	5A04601 ^{\$}	5A04623
11	VDL	5A04718	5A04719
12	OH	5A04701	5A04583 [#]
13	TT	Unconfirmed	UNRUNG
14	BB	598606 [#]	Unconfirmed
15	FE1	5A04702	598397
16	FE2c	Unconfirmed	Unconfirmed
17	FE3	5A09730 [#]	Unconfirmed
18	FE4	5A09689	5A04772
19	FE5	Unconfirmed ^{\$}	Unconfirmed
20	FE6	5A04791 [#]	Unconfirmed
21	FE7	5A09700 ^{\$}	Unconfirmed ^{\$}
22	FE8	Unconfirmed ^{\$}	5A04751
23	FE12	598611	5A04573 [#]
24	FE14	Unconfirmed ^{\$}	5A04621
25	HT	5A09723 ^{\$}	5A04750
26	MC1	5A04570	5A04741 [#]
27	MC2	5A04521	Unconfirmed
28	MC4	5A09663	5A04725
29	MC5	598395	Unconfirmed ^{\$}
30	CC	5A04738	Unconfirmed
31	FC	Unconfirmed ^{\$}	5A04727
32	LV6	5A04781 ^{\$}	Unconfirmed
33	UD	598615	5A09671
34	PSC	596325	5A04534
35	CYC	5A04769	5A04758
36	KK	5A04628	Unconfirmed ^{\$}
37	PP	598269 ^{\$}	598322
38	ET1	5A04776 ^{\$}	5A09670
39	ET2	5A04726	Unconfirmed ^{\$}
40	ET5	UNRUNG	5A04742
41	ET6	5A12344 [#]	598291
42	ET9	5A09741 [#]	598358 ^{\$}
43	REE2/REE4	Unconfirmed ^{\$}	5A04598
44	REE3	596392	5A04775
45	REE9	5A09711 [#]	5A04782
46	REE13	5A04582	5A04723

* Not included in productivity database.

^{\$} Missing or faded colour rings

[#] Identified after trapping to replace missing or faded colour rings, or if previously unringed

Additional non-breeding kestrels encountered during the season: -

Identified:

- 5A09695 - ID (L); Black / Dark Blue (R) WH OH 07/08 caught in BC trap at MC5 on 16th December whilst trying to catch breeding male at the site.
- 5A04794 - Grey (L); Pink / ID (R) WH MC2 06/07 seen at REE2 box tree at the beginning of the season. Previously bred at REE2 in 2007/08 season, but usurped by a new female this year.
- 5A09698 – Grey / Orange (L); ID (R) WH VDL 07/08 seen between FE14 and the main track on a hunting chair.

Unrung:

- Unrung bird seen at ET5 on 16th October and chased away by breeding male at the site.
- Unrung female found at FE13 on 19th December.

Unidentified:

- A kestrel flew in to REE11 box tree on 8th February but no identity was obtained.
- A third kestrel flew in to REE3 box tree on 6th October, but no identity was obtained.
- At FE10 an unidentified kestrel flew out of the box on arriving on 28th January.
- A third kestrel was seen interacting with the Black Bowl pair on several visits.

A2 – 2008/09 Fledglings

No.	Site	Date Ringed	IRN	Colour Combination
1	UD	07.11.08	5A09731	ID(L); Gy/Bk(R)
2	UD	07.11.08	5A09732	ID(L); Gy/Dk BI(R)
3	ET9	11.11.08	5A09733	ID(L); Gy/Dk Gr(R)
4	CC	14.11.08	5A09740	ID(L); Gy/W(R)
5	CC	14.11.08	5A09739	ID(L); O/Dk Gr(R)
6	FE1	18.11.08	5A09736	ID(L); Lt BI/Dk BI(R)
7	CC	21.11.08	5A09737	ID(L); Lt BI/Y(R)
-	ET1	21.11.08	5A09735	ID(L); Lt BI/Gy(R)
8	ET1	21.11.08	5A09742	ID(L); Lt BI/Lt BI(R)
9	ET1	21.11.08	5A09743	ID(L); Lt BI/R(R)
10	CYC	24.11.08	5A09744	ID(L); Lt BI/O(R)
-	CYC	24.11.08	5A09745	ID(L); Lt BI/Bk(R)
11	MC1	24.11.08	5A09746	ID(L); Lt BI/Dk Gr(R)
12	FE14	24.11.08	5A09747	ID(L); Bk/Y(R)
13	HT	24.11.08	5A09748	ID(L); Bk/Br(R)
14	HT	24.11.08	5A09749	ID(L); Bk/Bk(R)
15	BV3	27.11.08	5A09750	ID(L); Bk/R(R)
16	BV3	27.11.08	5A12301	ID(L); Bk/Gy(R)
17	OH	27.11.08	5A12302	ID(L); Bk/W(R)
18	OH	27.11.08	5A12303	ID(L); Br/Dk BI(R)
19	OH	27.11.08	5A12304	ID(L); Br/O(R)
20	MC4	27.11.08	5A12305	ID(L); Br/Y(R)
21	MC4	27.11.08	5A12306	ID(L); Br/W(R)
22	MC5	27.11.08	5A12307	ID(L); Dk BI/Dk Gr(R)
23	MC5	27.11.08	5A12308	ID(L); Dk BI/W(R)
24	MC5	27.11.08	5A12309	ID(L); Dk BI/Br(R)
25	MC5	27.11.08	5A12310	ID(L); Dk BI/R(R)
26	FE8	01.12.08	5A12311	ID(L); Br/Bk(R)
27	FE8	01.12.08	5A12312	ID(L); Br/Lt BI(R)
28	FE8	01.12.08	5A12313	ID(L); Dk BI/Y(R)
29	ER	01.12.08	5A12314	ID(L); Dk Gr/R(R)
30	ER	01.12.08	5A12315	ID(L); Dk Gr/Y(R)
31	ER	01.12.08	5A12316	ID(L); O/Y(R)
32	DC8	01.12.08	5A12317	ID(L); O/W(R)
33	DC8	01.12.08	5A12318	ID(L); O/R(R)
34	ET2	03.12.08	5A12319	ID(L); O/Dk BI(R)
35	ET2	03.12.08	5A12320	ID(L); R/O(R)
36	FE12	04.12.08	5A12321	ID(L); R/Lt BI(R)
37	FE12	04.12.08	5A12322	ID(L); R/W(R)
38	FE12	04.12.08	5A12323	ID(L); R/Y(R)
-	FE6	04.12.08	5A12324	ID(L); R/Gy(R)
-	FE6	04.12.08	5A12325	ID(L); R/R(R)
39	FE4	04.12.08	5A12326	ID(L); W/R(R)
40	FE4	04.12.08	5A12327	ID(L); Y/Dk BI(R)
41	KK	04.12.08	5A12328	Dk BI/Lt BI(L); ID(R)
42	KK	04.12.08	5A12329	Dk BI/Bk(L); ID(R)
43	FC	09.12.08	5A12330	Lt BI/Br(L); ID(R)
44	FC	09.12.08	5A12331	Lt BI/O(L); ID(R)
45	VDL	10.12.08	5A12332	Dk BI/Br(L); ID(R)
46	VDL	10.12.08	5A12334	O/Dk Gr(L); ID(R)

47	DCCP	17.12.08	5A12335	ID(L); W/Dk BI(R)
48	DCCP	17.12.08	5A12336	ID(L); W/Dk Gr(R)
49	REE13	22.12.08	5A12337	ID(L); Y/Y(R)
-	REE9	22.12.08	5A12338	ID(L); Y/Gy(R)
50	ET5	23.12.08	5A12339	ID(L); Y/Lt BI(R)
51	ET5	23.12.08	5A12340	Br/Bk(L); ID(R)
52	ET5	23.12.08	5A12341	Br/Dk Gr(L); ID(R)
53	YY	27.12.08	5A12342	Gy/Y(L); ID(R)
54	YY	27.12.08	5A12343	Gy/Dk Gr(L); ID(R)
55	BM	-	UNRUNG	-
56	BM	-	UNRUNG	-

Appendix B: SITE STATUS & WATCHES

B1 – Summary Site Status

No.	Site Name	Site Code	Type	08/09 Status*	Comment	Last Replaced	Last Used	Active Seasons
<u>Riche-en-Eau</u>								
1	Riche-en-Eau 2	REE2	box	Active	Struts repl. 2008		2008	4
2	Riche-en-Eau 3	REE3	box	Active	2 boxes		2008	12
3	Riche-en-Eau 4	REE4	box	Active	Struts repl. 2007		2008	5
4	Riche-en-Eau 6	REE6	box	Unusable			Never	-
5	Riche-en-Eau 8	REE8	box	Unusable			1994	5
6	Riche-en-Eau 9	REE9	box	Active		2008	2008	7
7	Riche-en-Eau 11	REE11	box	Unusable	Kestrel seen at box	2008	1996	2
8	Riche-en-Eau 13	REE13	box	Active			2008	9
<u>Le Vallon</u>								
9	Le Vallon 6	LV6	box	Active			2008	6
10	Le Vallon 12	LV12	box	-		2008	2007	4
11	Le Vallon 13	LV13	box	-		2004	2005	2
12	Champagne Cliff	CPC	cliff	-	Next to powerplant	-	2007	11
13	Powerstation Cliff	PSC	cliff	Active		-	2008	13
14	Chimney Cliff	CYC	cliff	Active		-	2008	13
15	Kartoffelklotz	KK	cliff	Active		-	2008	2
16	Scotsman's Drop	SD	cliff	-		-	2006	7
17	Mauritania	MAU	cliff	-		-	2007	11
18	Petit Parc	PP	cliff	Active		-	2008	15
19	Undetected	UD	cliff	Active		-	2008	8
20	Nouvelle Terre	NT	cliff	-		-	2002	2
21	Just Not Cricket	JNC	tree	-		-	2003	3
<u>Ferney</u>								
22	Ferney 1	FE1	box	Active			2008	19
23	Ferney 2a	FE2a	box	-			2007	17
24	Ferney 2c	FE2c	box	Active			2008	14
25	Ferney 3	FE3	box	Active			2008	12
26	Ferney 4	FE4	box	Active			2008	8
27	Ferney 5	FE5	box	Active			2008	17
28	Ferney 6	FE6	box	Active		2008	2008	18
29	Ferney 7	FE7	box	Active		2008	2008	16
30	Ferney 8	FE8	box	Active			2008	10
31	Ferney 9	FE9	box	-			2006	11
32	Ferney 10	FE10	box	Kestrel seen			2005	9
33	Ferney 11	FE11	box	-		2007	Never	0
34	Ferney 12	FE12	box	Active			2008	12
35	Ferney 13	FE13	box	Kestrel seen		2008	2004	4
36	Ferney14	FE14	box	Active			2008	4
37	Mount Camizard 1	MC1	box	Active			2008	12
38	Mount Camizard 2	MC2	box	Active	2 boxes	lower 2008	2008	19
39	Mount Camizard 4	MC4	box	Active			2008	2
40	Mount Camizard 5	MC5	box	Active			2008	8
41	Hole in Tree	HT	tree	Active		-	2008	1
42	Titmalot	TT	tree	Active	2+ trees	-	2008	5
43	Ferney Cliff	FC	cliff	Active		-	2008	1
44	Camizard Cliff	CC	cliff	Active		-	2008	18
45	Dragon's Spine	DRS	cliff	-		-	1999	4
46	Les Deux Malcs	LDM	tree	-		-	2004	1
<u>Etoile</u>								
47	Etoile 1	ET1	box	Active		2007	2008	8
48	Etoile 2	ET2	box	Active			2008	9
49	Etoile 3	ET3	box	Bees	2 boxes	2007, 2008	2007	9
50	Etoile 4	ET4	box	-		2007		5
51	Etoile 5	ET5	box	Active			2008	1

52	Etoile 6	ET6	box	Active		2008	6
53	Etoile 8	ET8	box	-		2000	2
54	Etoile 9	ET9	box	Active		2008	13
<u>Lion Mountain</u>							
55	The Dump	TD	tree	-	Also a rockface	1995	1
56	Morne Bestel	MB	cliff	-		2001	6
57	Cop Shop Cliff	CSC	cliff	-		1994	1
58	Koala Cliff	KC	cliff	Active		2008	14
59	First and Last	FL	tree	-		2004	1
60	F. Belle Vue	FBV	tree	-		1995	1
<u>Domaine d'Anse Jonchee</u>							
61	Black Bowl	BB	cliff	Active		2008	4
62	Black Cliffs	BC	cliff	-		2006	4
63	Black Boulder	BBD	cliff	-		2003	7
64	East Rock	ER	box	Active		2007 2008	13
65	East Rock Forest	ERF	tree	-		1996	3
66	East Rock Forest Cliff	ERFC	cliff	-		2001	2
67	Vallee de l'Est	VDL	box	Active		2008	19
68	Owen's House	OH	box	Active		2008	5
69	Owen's House 2	OH2	box	Unusable		2007	1
70	Domaine Car Park	DCCP	box	Active		2008	n/a
71	Domaine du Chasseur 5	DC5	box	OH ♀ seen		2007 1999	11
72	Domaine du Chasseur 7	DC7	box	-		2007 2005	13
73	Domaine du Chasseur 8	DC8	box	Active		2008	13
74	Ylang Ylang	YY	box	Active		2008	16
75	Ylang Chasse	YC	box	Active		2008	7
76	Ylang Forest	YF	box	Active		2007 2008	9
<u>Bambous Virieux Valley and Beyond</u>							
77	Bambous Virieux Tree	BVT	tree	-		2005	1
78	Jimbo's Bluff	JB	cliff	-		Never	0
79	Dessus et Desous	DED	cliff	-		2003	1
80	Dragon's View	DRV	cliff	-		2004	4
81	Bambous Virieux 3	BV3	box	Active		2007 2008	8
82	Bambous Pinnacle	BP	cliff	-	south face	2005	4
83	Big Malc	BM	cliff	Active	north face	2008	3
84	Isengard	ISC	cliff	Active		2008	8
85	Cat and Mouse Cliff	CMC	cliff	-		1999	1
86	Top Cat	TC	cliff	Kestrel seen		2002	2

* Where a '-' is given denotes lack of any kestrel activity at the site this season.

B2 - Watches

24th October 2008

Cop Shop Cliff (CSC) 07:30 – 10:45 (3hr15m) No kestrel activity.

Morne Bestel (MB) 06:45 – 08:45 (2hr) No kestrel activity.

28th October 2008

Black Boulder (BBD) 10:30 (2hr30m) No kestrel activity.

30th October 2008

Cat and Mouse Cliff (CMC) 11:45 – 16:00 (4hr15m) Between 12:00 and 12:45 a kestrel flew along the CMC – Isengard ridge frequently, alighting occasionally on or just below the ridgeline. At 14:15 a pair of kestrels flew past CMC from Top Cat direction towards Isengard. Since Isengard was found to be occupied on a subsequent visit, as well as Big Malc, it was deemed unlikely that there was an undetected pair at the CMC cavity.

2nd November 2008

Just Not Cricket (JNC) / Nouvelle Terre (NT) region 08:45am Kestrel seen flying with prey across track.

Nouvelle Terre (NT) 09:00 – 12:00 (3hr) No kestrel activity.

Mauritania (MAU) 10:00 – 13:00 (3hr) Kestrel seen flying past, probably the male from the Petit Parc pairing.

7th November 2008

Just Not Cricket 06:45 – 10:00 (3hr15m) No kestrel activity, but many Indian mynahs.

Just Not Cricket / Nouvelle Terre region 06:50 – 10:00 (3hr10m) Kestrel seen flying past with prey from JNC direction towards Undetected cliff. No other sighting in the area.

11th November 2008

Dragon's View (DRV) / Robin's Traverse (RT) 10:40 – 12:30 (1hr50m) Kestrel seen flying past Robin's Traverse but no other activity.

12th November 2008

Dessus et Desous (DED) 09:20 – 12:40 (3hr40m) No kestrel activity.

Bambous Virieux Tree (BVT) 09:45 – 12:30 (2hr45m) No kestrel activity.

21st November 2008

Etoile North-West Region 10:30 – 14:00 (3hr30m) No kestrel activity.

25th November 2008

Valley near old LV4 site 08:35 – 11:35 (3hr) No kestrels seen.

Pic Grand Fond (PGF) ridgeline 14:00 – 15:00 (1hr) A kestrel seen flying past hunting on several occasions but no sign of a nest in the vicinity of the peak.

2nd December 2008

East Rock Forest Cliff (ERFC) 08:30 – 11:30 (3hr) Various kestrel sightings above the forest in the East Rock valley, but movement between the Black Bowl cliff and the valley during a parallel watch suggests the pair seen were the Black Bowl breeding pair shortly after deserting their nest on Black Bowl.

8th December 2008

First and Last (FL) 11:00 – 14:30 (3hr30m) No kestrel activity.

11th December 2008

Top Cat (TC) 10:00 – 14:00 (4hr) Three-person watch from ridge tops surrounding the river basin. A single kestrel seen flying past East-West with prey, then seen again about 2hrs later flying East-West again, then a minute later returning West-East with a *Phelsuma* gecko. A couple of minutes after that it flew back East-West without the prey. This is likely to be a non-breeding bird, or may be the breeding male at Isengard or Big Malc provisioning the nest.

14th December 2008

The Dump (TD) 09:45 – 12:00 (2hr15m) No kestrels seen. Mutes seen below a cavity on a small section of exposed south-east facing rock face adjacent to the cane field.

6th January 2009

Top Cat 08:45 – 11:45 (3hr) Watch on the north face of the mount from the cane below. Eleanora's falcon seen frequently circling the peak. No kestrel activity.

8th January 2009

Chemin Francais 09:00 – 11:50 (2hr 50m) Watch on bluffs facing west which are on the boundary ridge with le Vallon. A single kestrel seen on two occasions flying high above the ridge and well into the le Vallon area. Reports of a pair of kestrels in Chemin Francais come from the chasse guardian in Riche-en-Eau.

B3 – Inactive sites

REE11 – mutes abundant below box entrance and moulted feathers inside box. Rotten, unusable and inaccessible. So replaced on 8th February, with access steps added. Whilst securing box in tree a kestrel came in, calling, but was immediately frightened off in a flurry of wingbeats by the two of us up the tree. No identity obtained.

REE8 – box accessed on 25th October, but empty and in terrible condition – completely unusable with signs of rats using it. Needs to be replaced.

REE5 – box barely in tree, completely unusable, and access track not possible on bike, only on foot since it is very overgrown with shrubs and grasses. Visited on 10th February.

FE2A – no sign of kestrel use throughout season on repeated visits.

FE9 – no kestrel use throughout season, but in use by white-tailed tropicbirds and mynahs during the season.

FE10 – Mutes and chest feathers in box, but never any nest or kestrel sighted there until 28th January when a kestrel flew out of the box upon approaching. No ID made.

FE11 – Bees' nest inside at the beginning of the season, and after it was removed the box was not touched by kestrels all season.

FE13 – Mutes and a potential scrape were found at the box at the beginning of the season. Since the box was in a poor state, a new one was put up on 12th October and new mutes and a scrape were found there on a subsequent visit. On 19th December an unringed female was seen in the tree, but that was the only sighting and although a scrape was consistently found in the box, there was no further sign that the box was being used as a nest.

ET3 – The box was occupied again by a tropicbird at the beginning of this season and the chick was removed and taken to the Gerald Durrell Endemic Wildlife Sanctuary on 30th September and the box entrance was narrowed using offcuts of wood so that tropics could not use the box. Another box was put up at this site on the same day, but by 16th October bees had built large nests in both boxes and these still remained at the end of the season since several smoking attempts failed.

ET4 – The box had a rat's nest in on every check during the season until early December when a white-tailed tropicbird was nesting inside. By late December the tropic had vanished and the box was empty once more.

ET8 – There were never any mutes below the box entrance or moulted kestrel feathers inside, but a scrape was repeatedly made in the substrate throughout the season, which is what prompted repeated checks on the box. But no signs of kestrels were ever seen there.

DC5 – The female from the Owen's House pair was seen going in and out of the box at the beginning of the season, but after that initial sighting on 20th September the box remained empty, with only spiderweb inside. By mid December a mynah nest had been built and was removed. It is likely that this box lies within the Owen's House pair territory this year, since the female in particular seems to be strong and aggressive.

DC7 – Absolutely nothing. Clean as a bean all season.

LV12 – The upper box was occupied by a white-tailed tropicbird at the beginning of the season, and after that remained empty all season until late January. On 21st January the lower box was replaced and the upper box was removed since it was positioned in an

inappropriately exposed position, almost always receiving tropicbirds. There is now just one box at this site.

LV13 – On checks throughout the season the box contained inactive mynah nests, which were consistently removed. A kestrel was seen flying high up above the box tree from UD direction towards the edge of le Vallon / Crescent Cliffs.

CPC – This rock bluff (closest to the Champagne Powerplant) was watched on 7th October, when a kestrel was seen briefly chasing two pigeons over the ridge above PSC. There were no mutes below any of the expected cavities and on 21st October, when abseiling to several cavities a kestrel came in and perched nearby, then flew past into the trees towards PSC. All the cavities were empty.

SD – No kestrels were seen at all for the duration of a visit to the site on 15th October, although there were plenty of pigeons roosting there. A further visit to the top of the cliff on 7th November again found no signs of kestrels.

B4 - Maintenance required next season

ET3 – remove bees' nests from both boxes

LV12 – pick up old box

MC1 – add access steps (4+)

REE8 – new box