

New Zealand Falcon
(*Falco novaeseelandiae*)
in Taranaki



New Zealand Falcon (*Falco novaeseelandiae*) in Taranaki

Dave Bell

Cover picture by Jamie Leindecker: Juvenile female falcon, Danses Pass, Central Otago, November 2001.

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1. Introduction

The New Zealand falcon (*Falco novaeseelandiae*) is a fast-flying raptor that is endemic to New Zealand. Regarded as one extremely variable species, there are three forms that vary in size, colour and habitats. The 'Bush Falcon' is found in the forests of the North Island and the northwestern South Island, the 'Eastern Falcon' habitat is the open country of the eastern South Island whilst the 'Southern Falcon' is of the coastal Fiordland, Stewart Island and the Auckland Islands (Heather and Robertson 1996). The falcon to be found in Taranaki is the Bush Falcon.

Falcons have been fully protected since 1970 and the Bush falcon is classified as Nationally Vulnerable (Hichmough 2002). Currently there is very little information available about the population trends of this species (Lawrence 2002) though it has been found that the population of Eastern Falcon in the Waihopai Valley, Marlborough has declined over the last 10 years (Gaze and Hutzler 2004).

Recently a survey was undertaken (Lawrence 2002) with an emphasis on the Bush Falcon in an attempt to ascertain if its population was declining, stable or increasing. Unfortunately the results were inconclusive but a large amount of useful information was collected.

2. Presence of falcon in Taranaki

In an attempt to obtain a better understanding of the distribution and population of falcon in Taranaki an initial collation of available records of recent sightings has been undertaken. This report does not purport to be a scientifically strong or statically robust report but simply a record of sightings of falcon in the Taranaki region.

2.1 Sources of Information

There were four sources of information on records of sightings of falcon in Taranaki used:

- Ø NZ Wildlife Service - Fauna Survey 1981 (New Plymouth Area Office, Department of Conservation).
- Ø Database of records of falcon sightings – Stratford Area Office, Department of Conservation.
- Ø Barry Hartley, Regional Representative Ornithological Society of New Zealand – personal records.
- Ø Dave Bell, Native Birds Taranaki – personal records and those reports provided directly by observers.

2.2 Falcon Records

A total of 113 records of sightings of falcon were collected. These records date from 1981 to September 2004 and encompass the area from Mokau in

the North, Waitotara Valley in the South and to the Tangarakau Gorge in the East.

The specific breakdown of these records between the four sources of information used is:

- Ø NZ Wildlife Service (WS) – 21 records
- Ø Database at Stratford Area Office (DOC) – 65 records
- Ø Barry Hartley (BH) – 17 records
- Ø Dave Bell (Pers) – 10 records

A consolidated list of all 113 records is at Appendix 1 - Falcon Sightings All Taranaki 1981 to 2004.

2.3 Graphic Display of Information

To provide for an easier appreciation of the outcome of the collation of the records, survey maps have been produced to graphically display the sighting of falcon in Taranaki. In consultation with Transfield Worley Limited, the locational data has been transferred to a Geographical Information System (GIS) and three colour maps produced.

2.3.1 Map One – Wildlife Service Fauna Survey 1981

Very little additional information is currently known about these records. The information listed and displayed has been transposed from the original 1 inch to the mile maps to provide an updated location. It is known that the survey did not include Egmont National Park. A total of 21 records are displayed on Map One.

2.3.2 Map Two – Taranaki Sightings 1992 to 2004

Map Two displays all falcon sightings in Taranaki, excluding Egmont National Park for the period 1992 to September 2004 and totals 70 records. It should be noted that there will be a bias to the area covered by Stratford Area Office as most of the sightings have come from that office's database.

2.3.3 Map Three – Egmont National Park

The 22 records of falcon sightings that are located within Egmont National Park (ENP) over the period 1992 to September 2004 have been extracted and are displayed on Map Three at a larger scale. Again a major portion of these records have been provided by the Stratford Area Office, being responsible for the ENP staff spend many hours working in ENP.

2.3.4 Additional Maps

With all the 113 falcon sighting records now in a GIS, additional maps of falcon presence in Taranaki can be easily produced for any specific period,

date or location. This GIS data will be kept up to date as additional records are gathered or received.

2.4 Falcon Records by Year

As a minimum the year for a falcon record was recorded, though in most instances, with the exception of the 1981 WS Fauna Survey, the month and date was also able to be recorded.

There were a total of 113 falcon records obtained and the breakdown by year of these records was:

Year	Records	Notes	Year	Records	Notes
1981	21	(1)	1998	1	
1992	1		1999	15	(2)
1993	0		2000	8	
1994	5		2001	14	
1995	8		2002	7	
1996	3		2003	10	
1997	8		2004	12	(3)

Notes: (1) Wildlife Service Fauna Survey.
(2) Stratford Area Office Falcon survey in Taranaki.
(3) To September 2004 only.

2.5 Comment

Apart from in 1999 (Clarke 2000) no formal survey of or publicity for falcon sightings has been undertaken in Taranaki, yet it can be seen that sightings though not frequent are regular within the region. Obviously these sightings are very dependent on people being in the area and this goes some way to explain that the most common areas of sightings are generally frequented to a greater degree.

Considered to possibly be the northern boundary for the common distribution and breeding of the falcon in the western North Island (Heather and Robertson 1996) it is pleasing to note that falcon are still observed. It is known that falcon have bred successfully in Egmont National Park (Clarke 2000) though the exact details of breeding over the whole region are presently unknown.

3. Further Activities

Though records have now been collated on falcon in Taranaki, there is still insufficient information to ascertain if the population is declining, stable or increasing. In a further attempt to ascertain this information it is proposed that the following activities be undertaken:

- Ø Continue the collation of historical records of falcon sightings in the Taranaki region as and when they become available.
- Ø Collate and plot all future falcon sightings as they are reported.
- Ø Attempt to establish if the population of falcon in Taranaki is declining, stable or increasing.

3.1 Historical Falcon Sightings

Historical falcon sightings still provide a good source of relevant data on the presence and abundance of the species in Taranaki. Attempts should be continued to source additional records, possibly with a publicity campaign and targeting further reliable sources.

Further research in to the current historical data held, especially the records from 1981 (WS Fauna Survey) could be warranted and provide additional relevant information.

3.2 Future Falcon Sightings

Continue to collect and collate future falcon sighting records for the Taranaki region. A number of avenues should be explored to ensure that relevant information is received, this could include;

- Ø A publicity campaign (in conjunction with gaining more historical sightings).
- Ø Liaising with the local DOC offices in New Plymouth, Stratford and Wanganui.
- Ø Targeting specific individuals with a known interest in falcons.
- Ø Gain the co-operation from groups and individuals who spend time in the bush and surrounding areas (farmers, hunters and trampers).

3.3 Monitoring of Falcon Population

The 1994-98 breeding survey of falcon (Lawrence 2002) attempted to ascertain the state of the population of bush falcon, by monitoring the survival and recruitment of falcon pairs at several sites, at least 3 pairs per DOC conservancy if possible.

Unfortunately within the Wanganui Conservancy, that incorporates the Taranaki region no monitoring was achieved in those years but subsequently in 1998/99 season a pair of falcon raised and fledged a juvenile in Egmont NP and appeared to be doing so again in 1999/00 (Clarke 2000).

Using the information currently available it is intended that a further attempt will now be made to monitor up to three falcon pairs for survival and recruitment in the Taranaki region.

It has been decided that three sites will be concentrated on in an attempt to locate and monitor nesting falcon. These sites are:

- Ø Egmont National Park
- Ø Mangamingi
- Ø Purangi

All these sites have had recent and relevant falcon sightings, allow for relative ease of access including good tracks, the availability of on site accommodation and supportive landowners and local community.

3.3.1 Egmont National Park

A total of 22 falcon sightings have been recorded in Egmont National Park (ENP) see Map Three. Of particular interest is North Egmont, including the North Egmont Visitor Centre (NEVC), Waiwhakaiho River valley and the surrounding area.

Eight sightings have been reported in this general area together with anecdotal evidence from trappers and walkers in the immediate vicinity. Of specific interest are the January 2002 record of a tramping party being dive-bombed by two falcons on the Kokowai Track (Record No 85) and the two recent sightings of falcon at NEVC (Record No 110 and 111).

3.3.2 Mangamingi

Mangamingi is located east of Eltham and includes many areas of native bush and Lakes Rotorangi and Rotokare. Of particular interest in the area are the Collier and Dickson Covenants where the South Taranaki branch of Forest and Bird has been undertaking predator control.

There have been a total of seven falcon sightings reported at these covenants and of specific interest are two from 2001, when in January four falcon were seen and heard and then in February two adult falcons were seen feeding two fledglings beside the main track through the covenants (Record No 71 and 72).

3.3.3 Purangi

Purangi is 40Km north-east of Inglewood and also includes many large areas of native bush both privately owned and crown land (DOC). There have recently been two sightings (Records No 91 and 113) of falcon at Bob and Karen Schumacher's 142 hectare property, of which 52 hectares of native bush is covenanted.

There are also private and commercial pine plantations in the area. Predator control has also recently been established, primarily targeting stoats, possums and rats aimed at protecting kiwi.

3.3.4 Other sites

As and when other sites where falcon are known to be established, particularly if breeding behaviour is observed and/or 'dive-bombing' of humans occurs these sites will also be investigated as time and resources permit.

Falcons have also recently been confirmed as breeding in exotic pine forest, particularly in cutover areas (Stewart and Hyde 2004). If the opportunity is available monitoring of areas of pine forest, especially at Te Wera Forest in eastern Taranaki will be undertaken.

4. Acknowledgements

I would like to expend my appreciation and acknowledge the assistance provided by the Department of Conservation - Stratford and New Plymouth Area Offices, Barry Hartley of the Ornithological Society of New Zealand and to all those people that took the time and effort to record and report falcon sightings.

I also would thank Jamie Leiendecker for the use of his photograph on the cover of this report, Transfield Worley Services Ltd in particular Alan Ramage, GIS Applications Engineer for producing the GIS Maps, Steve Lawrence from the Raptor Association of New Zealand for his helpful comments on an earlier draft and to Jane Hart for editorial assistance.

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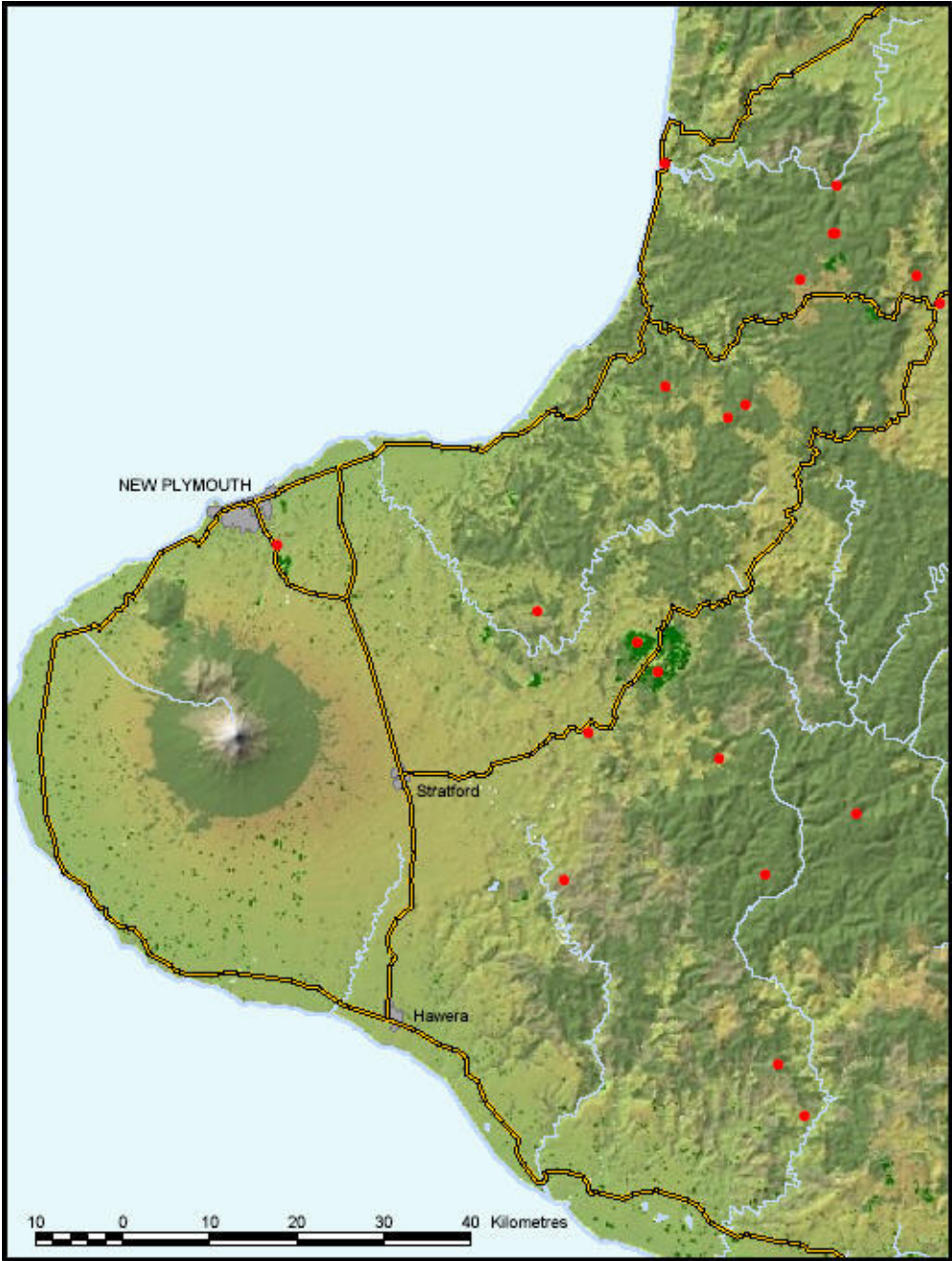
Falcon Sightings - All Taranaki 1981 to 2004

No	Date	Month	Year	Map	Easting	Northing	Source	Pers
1			1981	R18	704	689	WS	
2			1981	R18	800	640	WS	
3			1981	R18	827	609	WS	
4			1981	R19	603	492	WS	
5			1981	Q19	479	218	WS	
6			1981	R20	503	184	WS	
7			1981	R20	573	086	WS	
8			1981	R20	626	953	WS	
9			1981	R20	731	022	WS	
10			1981	R21	641	733	WS	
11			1981	R21	671	674	WS	
12			1981	Q20	395	945	WS	
13			1981	Q20	423	114	WS	
14			1981	Q19	364	255	WS	
15			1981	P19	065	330	WS	
16			1981	R18	511	514	WS	
17			1981	R18	666	635	WS	
18			1981	R18	707	688	WS	
19			1981	R19	583	477	WS	
20			1981	R18	510	770	WS	
21			1981	R18	708	744	WS	
22	10	Oct	1992	Q20	415	975	DOC	Bruce L
23	1	Jan	1994	Q20	291	065	DOC	James R
24	24	Oct	1994	Q20	285	092	DOC	Mark A
25	24	Nov	1994	Q21	396	835	DOC	Tony C
26	1	Dec	1994	P20	035	115	DOC	M Lovell
27	15	Dec	1994	Q20	425	197	DOC	Mr Ryan
28	12	Jan	1995	P20	063	095	DOC	Dean C
29	12	Jan	1995	R20	056	995	DOC	Rudy T
30		Jan	1995	R20	613	156	DOC	Murray P
31	27	Mar	1995	P20	966	084	DOC	Dean C
32	30	May	1995	R20	136	072	DOC	Victor C
33	11	Jun	1995	R18	605	790	DOC	Jim H
34	10	Oct	1995	P20	046	167	DOC	Dean C
35	30	Oct	1995	P20	968	153	DOC	Stephen R
36	26	Jan	1996	P20	040	128	DOC	Dave M
37	29	May	1996	R20	645	956	DOC	D Byers

38	27	Jun	1996	P20	020	145	DOC	Dean C
39	5	Apr	1997	Q21	385	755	DOC	Terry N
40	8	May	1997	Q19	338	283	DOC	Farmer
41	10	May	1997	Q19	415	421	BH	Barry H
42	20	May	1997	R20	265	836	DOC	Dean C
43	26	May	1997	Q20	546	985	DOC	Bob T
44	9	Oct	1997	R20	617	148	DOC	Dean C
45	2	Nov	1997	P19	040	216	BH	Barry H
46	7	Dec	1997	R18	510	792	BH	Barry H
47		Aug	1998	R20	563	078	DOC	LL Caskey
48	22	Feb	1999	Q19	270	260	DOC	Mr Larsen
49		Feb	1999	R20	563	078	DOC	Murray P
50		Feb	1999	Q19	309	463	DOC	Evelyn M
51	1	Mar	1999	Q19	443	575	DOC	Peter B
52	7	Mar	1999	Q20	375	915	DOC	Rex H
53	19	Mar	1999	Q20	950	992	DOC	Jenny B
54	29	Mar	1999	Q20	335	175	DOC	John C
55		Mar	1999	Q19	255	285	DOC	George M
56		Apr	1999	P20	968	148	DOC	Chris I
57	2	Jun	1999	Q20	316	153	DOC	Victor C
58	19	Jun	1999	P20	968	148	DOC	Kerry M
59	24	Jun	1999	Q20	398	116	DOC	Old Guy
60	11	Jul	1999	R18	515	769	BH	Barry H
61		Aug	1999	Q20	455	020	DOC	Brian M
62	1	Sep	1999	R20	613	167	DOC	Paul H
63	17	Mar	2000	Q20	204	062	DOC	Cedric Y
64	27	May	2000	Q20	375	923	BH	Barry H
65	24	Jul	2000	Q20	102	159	DOC	Cees B
66	20	Aug	2000	P20	959	089	Pers	Dave B
67	20	Sep	2000	P19	447	565	Pers	Dave B
68	23	Sep	2000	Q19	339	477	BH	Barry H
69	30	Nov	2000	P20	045	143	DOC	John M
70		Dec	2000	Q20	216	068	DOC	LL Caskey
71		Jan	2001	Q20	374	923	DOC	Rex H
72	10	Feb	2001	Q20	377	925	Pers	Bill M
73	10	Feb	2001	R20	616	164	DOC	Paul H
74		Feb	2001	Q20	216	068	DOC	Les C
75	24	Mar	2001	Q19	485	464	BH	Barry H
76	16	Apr	2001	Q20	394	903	BH	Barry H
77	16	May	2001	R20	659	168	BH	Barry H
78		Jul	2001	R19	654	364	DOC	Graig H
79	27	Jul	2001	Q20	205	072	DOC	Carl B
80	14	Aug	2001	Q20	223	994	DOC	Nic P

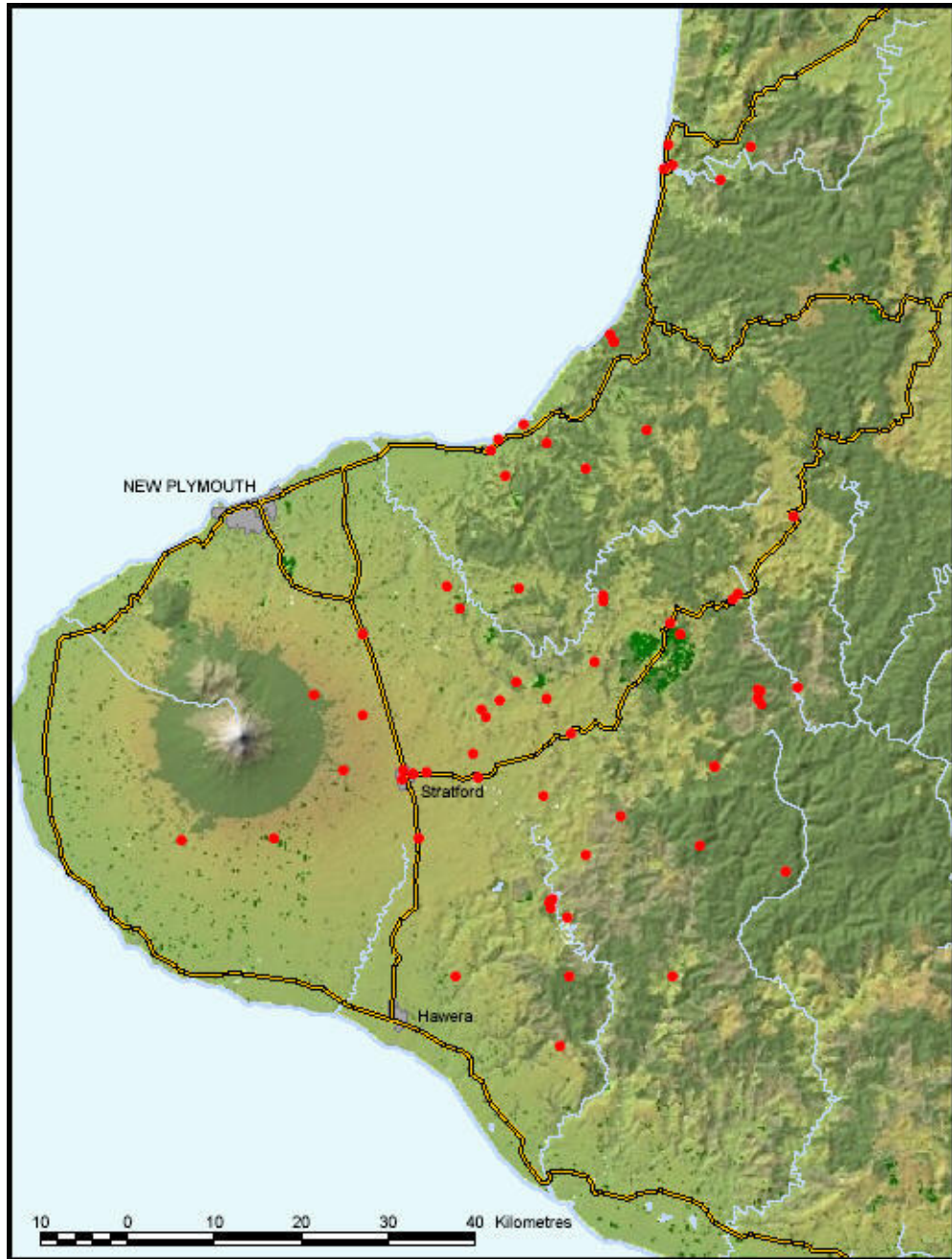
81	8	Sep	2001	R19	524	230	DOC	Dean C
82		Sep	2001	Q20	366	044	DOC	Graig H
83	3	Oct	2001	Q19	370	449	DOC	Dean C
84	18	Nov	2001	Q20	375	923	BH	Rex H
85	31	Jan	2002	P20	041	158	Pers	Joy McL
86	9	Mar	2002	Q20	373	920	Pers	Dave B
87	8	Apr	2002	Q20	295	143	DOC	Victor C
88	14	Apr	2002	R21	515	835	BH	Barry H
89	14	May	2002	Q18	447	565	Pers	Dave B
90	3	Aug	2002	R19	584	270	DOC	Sue H
91	15	Dec	2002	Q19	435	275	BH	Barry H
92	4	Apr	2003	Q20	375	923	BH	Rex H
93	6	Apr	2003	P20	054	086	BH	Various
94	25	May	2003	R19	512	243	DOC	Dean C
95	21	Jul	2003	P20	065	113	DOC	Dean C
96	15	Aug	2003	R18	570	752	BH	DOC
97	17	Aug	2003	Q19	306	442	BH	Barry H
98	25	Sep	2003	Q20	370	155	DOC	Victor C
99	10	Oct	2003	P20	955	113	DOC	Carl S
100	10	Oct	2003	P20	058	111	DOC	Ted D
101	16	Oct	2003	P20	052	128	DOC	Dean C
102	10	Mar	2004	P20	059	112	DOC	Dean C
103	30	Apr	2004	Q20	232	070	DOC	Dean C
104	13	May	2004	P20	050	173	DOC	Dean C
105	28	Jun	2004	Q20	158	137	DOC	Joe C
106	1	Jul	2004	Q20	300	135	DOC	Brian M
107	7	Jul	2004	R19	590	276	DOC	Brian M
108	7	Jul	2004	Q20	158	230	DOC	Dean C
109	13	Jul	2004	R18	505	765	BH	Barry H
110	2	Aug	2004	P20	046	144	Pers	Joy McL
111	19	Aug	2004	P20	046	144	Pers	Joy McL
112	26	Aug	2004	Q19	322	411	Pers	Kirsty M
113	3	Sep	2004	Q19	435	267	Pers	Sid M

FALCON SIGHTINGS
Taranaki 1981



FALCON SIGHTINGS

Taranaki 1992 to 2004



FALCON SIGHTINGS

Egmont National Park 1992 to 2004

