

**Surveys for the Orange-bellied Parrot, Wedge-tailed Eagle and
White-bellied Sea Eagle at the TasGold Exploration area, Wart
Hill, Southwest Tasmania.**



Lewis River Mouth (M. Knight)

**A report of survey findings prepared by Jon Starks, Mark Antos and
Andrew Silcocks.**

January 2005



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Birds Australia
415 Riversdale Road
Hawthorn East VIC 3123
Australia

Tel: (Australia): (03) 9882 2622 Fax: (03) 9882 2677
(Overseas): +613 9882 2622 Fax: +613 9882 2677
E-mail: mail@birdsaustralia.com.au

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TasGold Ltd. Bird Surveys, 29 Dec. 2004 to 2 Jan. 2005

Introduction

Surveys for the Orange-bellied Parrot, Wedge-tailed Eagle and White-bellied Sea Eagle were conducted within the area of TasGold's mining operations in the vicinity of the Lewis River and Wart Hill areas of the Southwest Conservation Area, Tasmania. The surveys were conducted at the direction of the Department of Primary Industries, Water and Environment, to ensure that mining exploration in the area did not pose a threat to these and other species. The surveys were a continuation of previous surveys conducted in late 2003. Once again, no Orange-bellied Parrots or Wedge-tailed Eagles were recorded. White-bellied Sea Eagles were sighted but no evidence of nesting was observed.

Methods and notes on logistical issues.

Surveys

Methods used for surveying for Orange-bellied Parrots (OBPs) consisted of two hour watches by observers stationed at the edge of suitable wooded nesting habitat with hollow-bearing trees and open sedgeland foraging habitat. Birds commuting between the two habitats would be detected by their contact calls and visually. Surveys coincided with the breeding period of the parrots. Methods used for surveying for eagles consisted of visual observation at all times. Areas of potential White-bellied Sea Eagle nesting sites were visually scanned from high vantage points for evidence of nesting. All surveys were conducted by Jon Starks (JS), Andrew Silcocks (AS) and Mark Antos (MA). All observers have had experience in identifying *Neophema* parrots, and are expert ornithologists. All used state-of-the-art optical equipment.

Study area

From the supplied map, TasGold identified five priority zones in the Wart Hill/ Elliott Bay exploration areas and divided them into one high, two medium and two low priority zones. Other individual and clustered drill sites were marked but were not given a priority listing. Due to the limited amount of person hours which could be spent conducting the bird searches, only the areas around the priority zones were searched.

Priority Zones:

- High Priority Zone Wart Hill – an area of intense drilling.
- Medium Priority Zone Voyager 19 – contains the high priority zone and drill sites SWDOO1 and SDH2.
- Medium Priority Zone Voyager 30 – contains drill sites SC005, SC007, SC008, and SC006.
- Low Priority Zone Voyager 29 – opposite Wart Hill camp, contains two drill sites – EC1 and EC2A.

- **Low Priority Zone Voyager 3 (Elliott Bay)** – contains the 3 sites covered plus V8/27, V8/28, V8/29, V8/31, V8/32 (not covered).

Summary of activities

29 Dec.

Arrived at the site at about 11:30 am. A settling in and familiarization with the camp and terrain in the search area followed. From 14:30, a two hour watch for OBPs was made at the two low priority drill sites (Voyager 29 West). Following this, an assessment was made of the survey requirements needed to cover the priority areas. It was not considered possible with the person-hours available to cover all drill sites in the priority areas. After gaining an appreciation of the task at hand and the terrain it was decided to slightly modify the survey methodology. The spacing between listening points was increased from 200 to 250 metres as it was considered that the terrain and weather conditions made listening detection possible over this slight increase in distance.

After the quad bikes were flown in, a preliminary exploration was made of the tracks to the south and the medium priority drill area Voyager 30.

30 Dec.

All day spent searching around high priority zone (Wart Hill) within Voyager 19 area.

31 Dec.

One of the quad bikes had a start fault, making only one bike available. The group split up for surveying purposes; MA walked to Voyager 30 area to conduct OBP listens there. This area appeared to support sub-optimal OBP habitat. The long unburned sedgeland was dominated by woody plants up to 1.5 metres tall in many places and the adjacent wooded country contained very few hollow-bearing trees.

JS and AS took the other quad bike to the low priority Voyager 3 area at Elliott Bay. A lack of any prior knowledge of track conditions and locations severely delayed travel to the search area. The bike became bogged twice in heavy mud, the first time taking two hours to extricate. The track between Wart Hill and Low Rocky Point Track was multi-branched, not obvious and required back-tracking to find the most suitable way through. A large tree across the track near the Lewis River also hampered progress. In total, it took over 5 h to reach the Voyager 3 site. A functional second bike would have allowed us to winch the bogged bike clear much quicker and allowed a speedier progress.

Because of the limited time thus available, only six OBP listens of 1 hr duration around three drill sites (V8/26, V8/34, V8/7) were possible. However, the only suitable OBP nesting habitat near these sites was along the Barrel Creek, which we covered at 250 m intervals, though of 1 hr duration each.

1 Jan.

The second bike had been repaired. The team headed to the proposed landing site at Lewis River mouth. Few suitable nest trees appeared to occur within a 1 km area of the landing site. High vantage points around the deeply-incised valley of the river provided excellent views of the forest along its banks and opportunities to scan for eagle nests. A two hour listen and search was also conducted for OBPs at this site.

2 Jan.

The morning was spent conducting OBP listens between the Medium Priority Zone Voyager 19 drill sites SWDOO1 and SDH2, and the Low Priority Zone Voyager 29 West drill sites near the Wart Hill camp.

Weather

Weather conditions on the 29, 30 and 31 of Dec were fine and sunny with light winds. The weather on the 1 Jan consisted of sunny and overcast conditions interspersed with brief light showers. The weather deteriorated on 2 Jan with a few passing showers however sunny periods were present.

Results

A total of 55.5 person-hours of direct surveying for OBPs along forest edges by drill sites was conducted. No OBPs or Blue-winged Parrots were seen nor heard during surveys. Table 1 provides a summary of the locations and duration of surveys. Other hollow-nesting species recorded during surveys are also listed.

A total of 6 person-hours were spent looking for White-bellied Sea Eagles and OBPs at the mouth of the Lewis River. In addition, more time was spent scanning forest along the river bank for eagle nests. Despite excellent views of the riverside forest, few potential nesting trees were seen and no evidence of nesting was recorded. A single adult White-bellied Sea Eagle was observed flying up from the river to the east of the proposed landing site. This bird continued to gain elevation and flew off eastward. Another adult bird was seen near the mouth of the river apparently flying down to the rocks. Presumably the same bird was later seen heading north along the coast. Table 2 provides a summary of survey results at the Lewis River.

No Wedge-tailed Eagles were sighted during the survey period.

A total of 42 bird species were recorded in the area. Table 3 provides a breakdown of species recorded during the OBP and eagle surveys.

Conclusion

Despite a survey effort focusing on the priority drilling sites, none of the target species were detected. This suggests that these areas are not utilised on a regular and frequent basis by the target species in late 2004/early 2005.

Table 1. Summary of OBP surveys. Other hollow-nesting species detected on surveys are also included. (note that given close proximity of observers to each other, same hollow-nesting birds likely to have been recorded by each observer).

Date	Easting	Northing	Start	End	OBPs	Sea Eagles	Observer	Area	Notes
29/12/04	379374	5248946	14:30	16:30	nil	nil	JS	EC1	
29/12/04	379382	5248783	14:30	16:30	nil	nil	AS	EC1	
29/12/04	379390	5248597	14:30	16:30	nil	nil	MA	EC1	
30/12/04	379261	5250885	0900	1100	nil	nil	JS	Voyager 19	fine, sunny, light wind
30/12/04	379118	5251024	0900	1100	nil	nil	MA	Voyager 19	
30/12/04	379070	5251518	1130	1330	nil	nil	JS	Voyager 19	wind picked up
30/12/04	379590	5251528	1640	1840	nil	nil	JS	Voyager 19	
30/12/04	379927	5250243	1915	2015	nil	nil	JS	Voyager 19	
30/12/04	379135	5250760	0900	1100	nil	nil	AS	Voyager 19	
30/12/04	379143	5251843	1130	1330	nil	nil	AS	Voyager 19	
30/12/04	379324	5252088	1400	1600	nil	nil	AS	Voyager 19	
30/12/04	379809	5250937	1645	1845	nil	1	AS	Voyager 19	Sea-Eagle flew low over Wart Hill from the west and watched for several kms., Green Rosella 5
30/12/04	379937	5250439	1915	2045	nil	nil	AS	Voyager 19	Yellow-tailed Black-Cockatoo 1, Green Rosella 2, Tree Martin 1
30/12/04	379275	5251525	1130	1330	nil	nil	MA	Voyager 19	Yellow-tailed Black-Cockatoo
30/12/04	379614	5251812	1400	1600	nil	nil	MA	Voyager 19	Yellow-tailed Black-Cockatoo, Green Rosella
30/12/04	379694	5251284	1645	1845	nil	nil	MA	Voyager 19	Green Rosella
30/12/04	379865	5250628	1910	2040	nil	nil	MA	Voyager 19	Yellow-tailed Black-Cockatoo
31/12/04	384232	5241196	1415	1515	nil	nil	JS	Voyager 8	fine, sunny, light wind
31/12/04	383904	5242393	1553	1653	nil	nil	JS	Voyager 8	Tree Martin
31/12/04	383975	5242265	1700	1800	nil	nil	JS	Voyager 8	Common Starling x 1, Tree Martin x 3, Green Rosella x 1
31/12/04	384011	5241377	1415	1515	nil	nil	AS	Voyager 8	Sulphur-crested Cockatoo 1
31/12/04	383868	5242128	1545	1645	nil	nil	AS	Voyager 8	Common Starling 1, Tree Martin 3
31/12/04	383764	5241960	1650	1750	nil	nil	AS	Voyager 8	
31/12/04	378633	5246990	0815	1015	nil	nil	MA	Voyager 30	
31/12/04	378400	5246715	1030	1230	nil	nil	MA	Voyager 30	
31/12/04	378224	5246543	1240	1440	nil	nil	MA	Voyager 30	Common Starling

31/12/04	377895	5246405	1505	1705	nil	nil	MA	Voyager 30	Yellow-tailed Black-Cockatoo
31/12/04	377615	5246489	1730	1930	nil	nil	MA	Voyager 30	Yellow-tailed Black-Cockatoo
2/01/05	378720	5250008	0940	1140	nil	nil	MA	Voyager 29	Yellow-tailed Black-Cockatoo
2/01/05	378851	5249746	1215	1315	nil	nil	MA	Voyager 29	Yellow-tailed Black-Cockatoo
2/01/05	378981	5250545	0945	1145	nil	nil	AS	Voyager 29	Yellow-tailed Black-Cockatoo 1
2/01/05	378903	5249502	1215	1315	nil	nil	AS	Voyager 29	Yellow-tailed Black-Cockatoo 1, Green Rosella 1
2/01/05	378820	5250311	0945	1145	nil	nil	JS	Voyager 29	Yellow-tailed Black-Cockatoo 1, Green Rosella 1
2/01/05	378880	5249250	1220	1320	nil	nil	JS	Voyager 29	

Table 2. Summary of White-bellied Sea Eagle surveys and observations at the Lewis River.

Date	Easting	Northing	Start	End	OBPs	Sea Eagles	Observer	Area	Notes
1/01/05	378009	5243668	1300	1500	nil		JS	Lewis R	
1/01/05			1529			1	all	Lewis R	flying up coast from Lewis R mouth. Probably same bird as observed at 1315 (see below)
1/01/05	378088	5243668	1200			1	all	Lewis R	circles up from near river and climbed heading east
1/01/05	378213	5243735	1300	1500	nil	nil	MA	Lewis R	
1/01/05	377527	5243549	1315	1515	nil	1	AS	Lewis R	Adult flew southwards and appeared to go down on the rocks at the mouth of the Lewis R

Table 3. List of all species recorded during surveys and within the Wart Hill area.

Species	Species recorded OBP surveys	Species recorded Eagle surveys	Full list
Great Cormorant		+	+
Short-tailed Shearwater			+
Australasian Gannet			+
White-bellied Sea-Eagle	+	+	+
Swamp Harrier			+
Brown Falcon	+		+
Latham's Snipe	(+) close		+
Pied Oystercatcher			+
Sooty Oystercatcher			+
Kelp Gull			+
Pacific Gull			+
Silver Gull			+
Brush Bronzewing		+	+
Yellow-tailed Black-Cockatoo	+	+	+
Sulphur-crested Cockatoo	+		+
Green Rosella	+		+
Ground Parrot	(+) close		+
Southern Boobook			+
White-throated Needletail	+		+
Southern Emu-wren	+		+
Tasmanian Scrubwren	+	+	+
Striated Fieldwren	+	+	+
Tasmanian Thornbill	+	+	+
Yellow-throated Honeyeater	+	+	+
Strong-billed Honeyeater	+		+
Crescent Honeyeater	+	+	+
New Holland Honeyeater	+	+	+
Eastern Spinebill	+	+	+
Dusky Robin			+
Golden Whistler	+		+
Olive Whistler	+		+
Grey Shrike-thrush	+	+	+
Grey Fantail	+	+	+
Black-faced Cuckoo-Shrike	+		+
Black Currawong	+	+	+
Forest Raven	+	+	+
Richard's Pipit			+
Beautiful Firetail	+		+
Welcome Swallow	+	+	+
Tree Martin	+		+
Silvereye		+	+
Common Starling	+		+