

NORTHERN RIVERS REGION

To NESFHAB representatives:

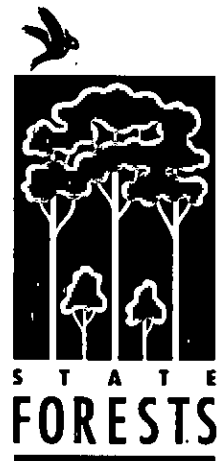
1) Georgia Beyer

2) Daniel Hall

From Mark Carron, Harvesting Advisory Board Co-ordinator

Date 9 May 1998

Subject FLORA and FAUNA SURVEY REPORTS



Attached please find a copy of pre-harvest flora and fauna surveys conducted in Casino Management Area Mt Belmore S.F. Compartments 412, 415 and 416.

Regards


Mark Carron



**STATE FORESTS of NSW.
THREATENED SPECIES PROTOCOL PRE-LOGGING AND
PRE-ROADING SURVEY REPORT - 1998.**

Region	Northern Rivers	Management Area	Casino
State Forest	Mt Belmore	Compartments	412, 415, 416

PART A. DESKTOP REVIEW

Date of Review: 3/98

Undertaken by: K. McCray, W. Longmore

1. Previous Surveys undertaken within 2 km or 5 km.

Survey Type	Source	Date	Distance	Reliable Survey
None known				

Notes: No previous surveys known within 2km or 5km of these compartments.

2. Results of Database Search - Species recorded within 2 km or 5 km.

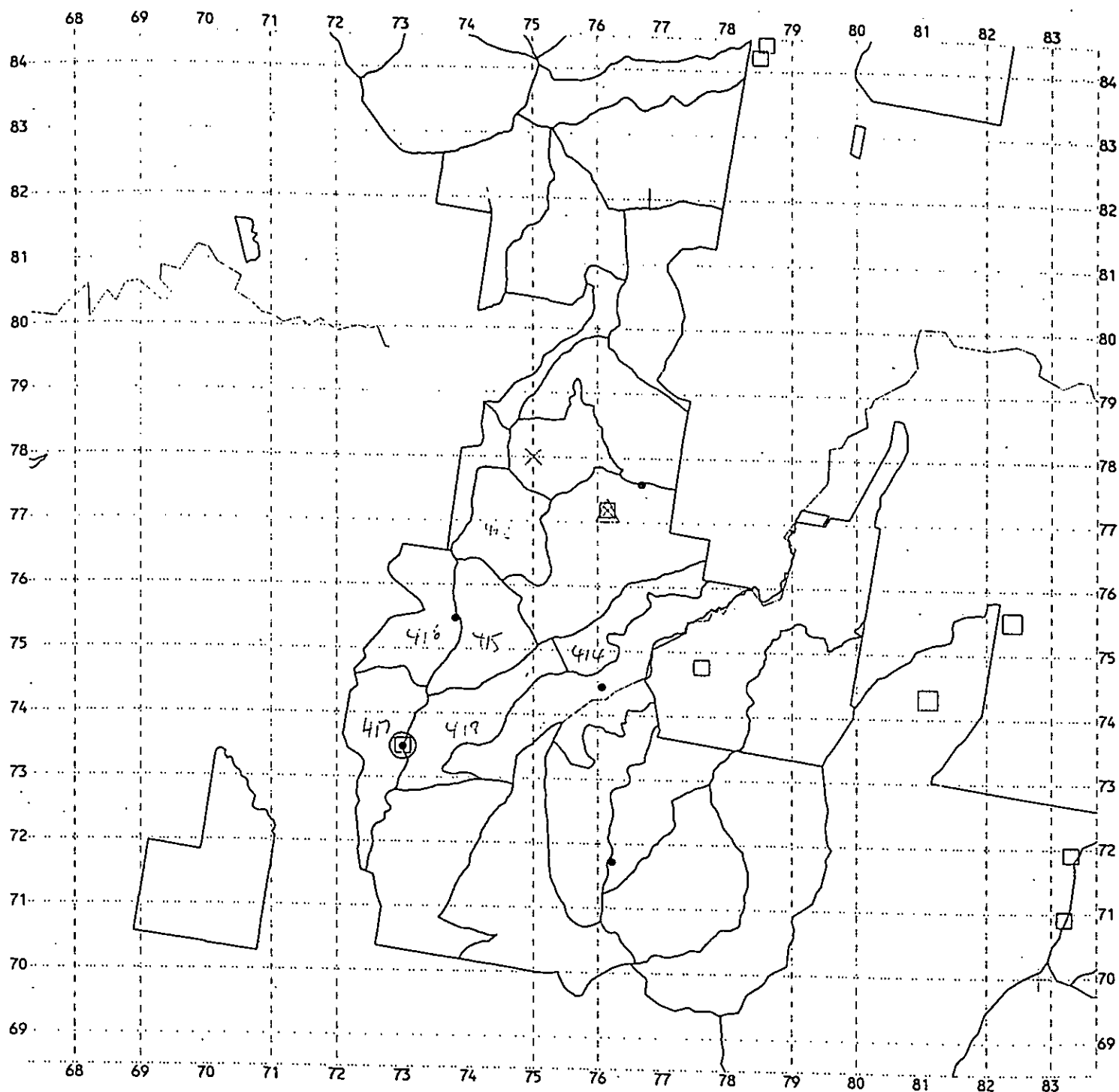
Species Name	Source
Glossy-black Cockatoo	NPWS WinERMS and SFNSW Incidentals database
Powerful Owl	"
Masked Owl	"
Sooty Owl	"
Yellow-bellied Glider	"
Little Bent-wing Bat	"

NPWS Atlas Date: Accessed 4/3/98

SF Fauna Records Updated to: Accessed 23/3/98

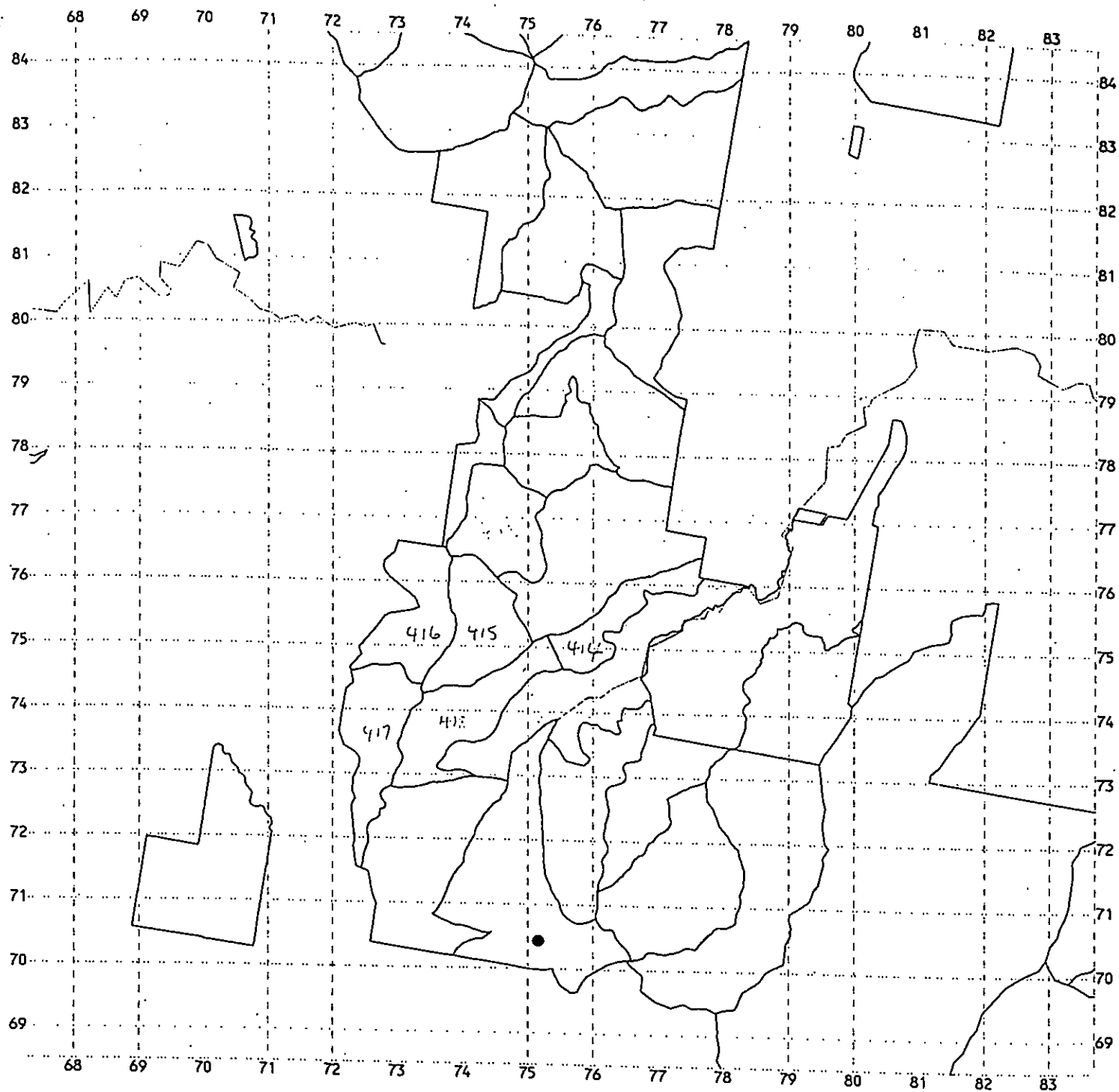
SF Flora Records Updated to: Accessed 23/3/98

Notes: NPWS WinERMS maps attached, showing previous threatened flora/fauna records nearby.



Mt. Belmore SF N0.361- Cpts 412, 413 & 414
ATLAS Sched 1 & 2 Fauna

- Glossy Black-Cockatoo
- △ Masked Owl
- × Powerful Owl
- Sooty Owl
- Squirrel Glider
- Yellow-bellied Glider
- ⊕ *Miniopterus australis*



Mt. Belmore SF N0.361- Cpts 412,413 & 414
Restricted S1 & 2 Flora

● *Grevillea quadricauda*

Northern Rivers Region - Threatened Species Pre-logging and Pre-roading Survey

Region	Northern Rivers	Management Area	Casino
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PART B. Flora and Threatened Fauna Features Traverse

Net Area: 230 hectares (conservative estimate)
 Traverse Length: 7.8 kilometres (route of traverses on attached map)
 Surveyed By: D. Binns
 Duration of Traverse: 10 (Person Hours)

1. Conservation Protocol Appendix 1 Flora Detections

Species Name	AMG East	AMG North	Locality Description	Date	Observers Name	Number Observed	Count/ Estimate
<i>Hibbertia marginata</i>	4 73 850	67 74 800	Cpt 415, F.T. 41, open forest on midslope. Marked in field with pink tape.	6/4/98	D. Binns	10 (0.01ha)	E
<i>Hibbertia marginata</i>	4 73 430	67 74 850	Cpt 416, F.T. 41. Marked in field with pink tape.	6/4/98	D. Binns	300 (0.1ha)	E

Notes: *Hibbertia marginata* (TSC Schedule 2)
 Two separate stands were located, one very small with only about ten plants, the other quite substantial with about 300 plants. Both stands have been flagged in the field with pink tape and approximate locations are marked on the attached map.

2. Conservation Protocol Threatened Fauna Features Detected

Feature Type	Marked in Field	Marked on Map
Nil		

Notes: No threatened fauna features detected.

Northern Rivers Region - Threatened Species Pre-logging and Pre-roading Survey

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PART C: TARGETED FAUNA SURVEYS

1. Assessment of Surveys Required

Survey Type	Survey Required (Y/N/IP ¹)
Spotlight	Y
Nocturnal Call Playback	Y
Koala	Y
Hairtubes	IP
Scat and Track	Y
Riparian Frog	Y*
Non-riparian Frog	Y*
Micro Bats	Y*
Small Mammals	N
Diurnal Birds	Y*

*Depending upon habitat assessment.

Notes: No previous surveys known within 2 or 5km of these compartments.

2. Surveys Undertaken

Survey Type	Date Undertaken	Time Spent	Undertaken By
Koala star transect (415)	1/4/98	2:30 hrs	K. Harvey, R. Herklots
Koala traverse (412)	24/3/98	2:05 hrs	J. Reside
Koala traverse (415)	26/3/98	2:30 hrs	N. Douglas, R. Herklots, N. Harvey
Koala traverse (416)	25/3/98	2:45 hrs	J. Reside
Call playback (site 1)	24&26/3/98	0:50 hrs (x2)	N. Harvey, R. Herklots
Call playback (site 2)	24&26/3/98	0:50 hrs (x2)	K. Harvey, R. Herklots
Call playback (site 3)	24&26/3/98	0:50 hrs (x2)	K. Harvey, R. Herklots
Call playback (site 4)	26&31/3/98	1:05&0:50 hrs	K. Harvey, R. Herklots, N. Harvey
Harp trap-2 traps (site 1)	25-27/3/98	4 trap nights	N. Douglas, N. Harvey
Anabat survey (site A)	25/3/98	0:30 hrs	N. Douglas, N. Harvey
Anabat survey (site B)	24/3/98	0:30 hrs	N. Douglas, N. Harvey
Spotlight-vehicle&foot (T1)	24&26/3/98	0:50 hrs (1.0km)	N. Douglas, N. Harvey
Spotlight - foot (T2)	24/3/98	1:00 hrs (0.7km)	K. Harvey, R. Herklots, J. Reside
Spotlight - foot (T3)	24&26/3/98	1:00 hrs (1.0km)	K. Harvey, R. Herklots, J. Reside
Spotlight-vehicle(T2) repeat	1/4/98	1:00 hrs (0.7km)	K. Harvey, R. Herklots
Spotlight - foot (T4)	26/3/98	2:15 hrs (4.2km)	K. Harvey, N. Douglas
Spotlight - foot (T5)	26&31/3/98	1:05 hrs (1.2km)	K. Harvey, R. Herklots
Scat/track traverse(415/416)	25/3/98	1:00 hrs	R. Herklots
Scat/track traverse(412)	24/3/98	1:00 hrs	J. Reside

Location of surveys shown on attached maps. 1:20,000 GIS maps used instead of 1:15,000 to represent the survey area more clearly and in total.

Northern Rivers Region - Threatened Species Pre-logging and Pre-roading Survey

Region	Northern Rivers	Management Area	Casino
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PART D. SURVEY RESULTS

Prepared By: Ken McCray

Date: 20/4/98

New Threatened Fauna Detections

Species Name	AMG East	AMG North	Date	Compartment	Observation Type	Observers Name	Survey/Incidental
Yellow-bellied Glider	4 73 950	67 76 500	26/3/98	412	Heard	K. Harvey, R. Herklots	Survey
Koala	4 73 450	67 74 350	31/3/98	415	Seen	K. Harvey, R. Herklots	Survey
Yellow-bellied Glider	4 73 350	67 74 300	31/3/98	415	Heard	K. Harvey, R. Herklots	Survey

SUMMARY

GENERAL

The survey area is composed of very open dry sclerophyll forest (forest types 36, 37, 41, 41/97, 65/70 with forest type 53 [small areas, dry for this type] in some gully areas and a small area of forest type 74 in the north of compartment 412). Weather conditions were generally very dry previous to and during the survey period. For further details of the survey area, refer to the harvesting plan for these compartments. Net area is provided in part B of this report, surveys undertaken are provided in part C of this report, and new threatened fauna records within these compartments are provided in part D of this report. Please note that surveys involve an integrated process and that survey types and objectives are not carried out in isolation of each other or of field realities.

FLORA

Traverse surveys were carried out in accordance with the TSSD protocol on 6-7 April 1998. Four separate traverses were undertaken throughout the three compartments. Approximate locations of traverse routes are shown on the attached map. See part B of this report for further details.

FAUNA

TRAVERSE SURVEYS

Surveys for fauna and threatened fauna features were integrated both into the flora traverses, Koala traverses and throughout general activities (eg travel, habitat assessment) and surveys (eg scat/track surveys). No threatened fauna or threatened fauna features were located throughout these surveys. Integrated/koala traverse surveys were carried out in all three compartments (three trees with low numbers of scats in total detected) and a star traverse was carried out in compartment 415 following the spotlight detection of a Koala (one scat under two separate trees detected), with no high-use areas identified (traverse routes and location of star traverse shown on map 4 attached). Koala transects were conducted within potential koala habitat within the net logging area (a small area of old growth was sampled on the transect in compartment 416) and forest types 41, 37a, 36, 41/97 and 65/70b were traversed.

SPOTLIGHT SURVEYS

A total of 3.9km of spotlight traverse (repeated) was conducted throughout the survey period (see part C and map 3 of this report). Significant detections included a koala sighting. An owl was sighted on 24/3/98, however the brevity of the sighting made positive identification impossible. The continuation of the 4.2km traverse on 26/3/98 identified both Yellow-bellied Glider and a Yellow-bellied Glider V-notch tree, however both these detections occurred outside the 415/416 boundary.

CALL PLAYBACK SURVEYS

Four call playback survey sites were sampled during surveys in these compartments. Despite previous records of Masked, Powerful and Sooty Owls within 2km this survey did not detect these species. Yellow-bellied Gliders were detected during this survey at playback sites 2 and 4.

FROG SURVEYS

Frog surveys were not carried out in these compartments as there was no record of any threatened species within 2km and no potential habitat identified within the compartments. Habitat assessments were carried out on 24/3/98, and throughout the survey period, and no suitable sites were found. Gullies were very dry and suitable habitat components for threatened frog species were not present.

BAT SURVEYS

Some opportunistic bat surveys were carried out although unnecessary as per the TSSD. Sites were chosen to obtain the best possible sample of bats in general, as no suitable potential habitat was present for species requiring targetted surveys in the TSSD. Two harp traps were set side by side at one site to maximise potential captures and two anabat sites were sampled. No threatened bat species were detected throughout these surveys.

Northern Rivers Region - Threatened Species Pre-logging and Pre-roading Survey

DIURNAL BIRDS

Specific diurnal bird surveys were not carried out in these compartments (though are always incorporated within other surveys and activities). On 29/3/98 W. Longmore and K. McCray spent several hours in these compartments assessing them for likelihood of threatened diurnal bird species presence. It was considered that the only species of concern likely to occur in this area would be the Glossy-black Cockatoo, this is confirmed through previous records of this species nearby. No detections of threatened bird species were made within these compartments throughout the survey period. However, a pair of Glossy-black Cockatoos were observed upon leaving the compartments along Caravan road on 29/3/98, outside the compartment boundaries. Additionally, another incidental record of Glossy-black Cockatoo was obtained in compartment 418 approximately 1km south of compartment 415 during surveys.

OTHER

Scat/track surveys were conducted as per the TSSD. Nothing significant was detected, however two predator scats were collected in compartment 412; these have been submitted for analysis (results not yet available).

Attachments:

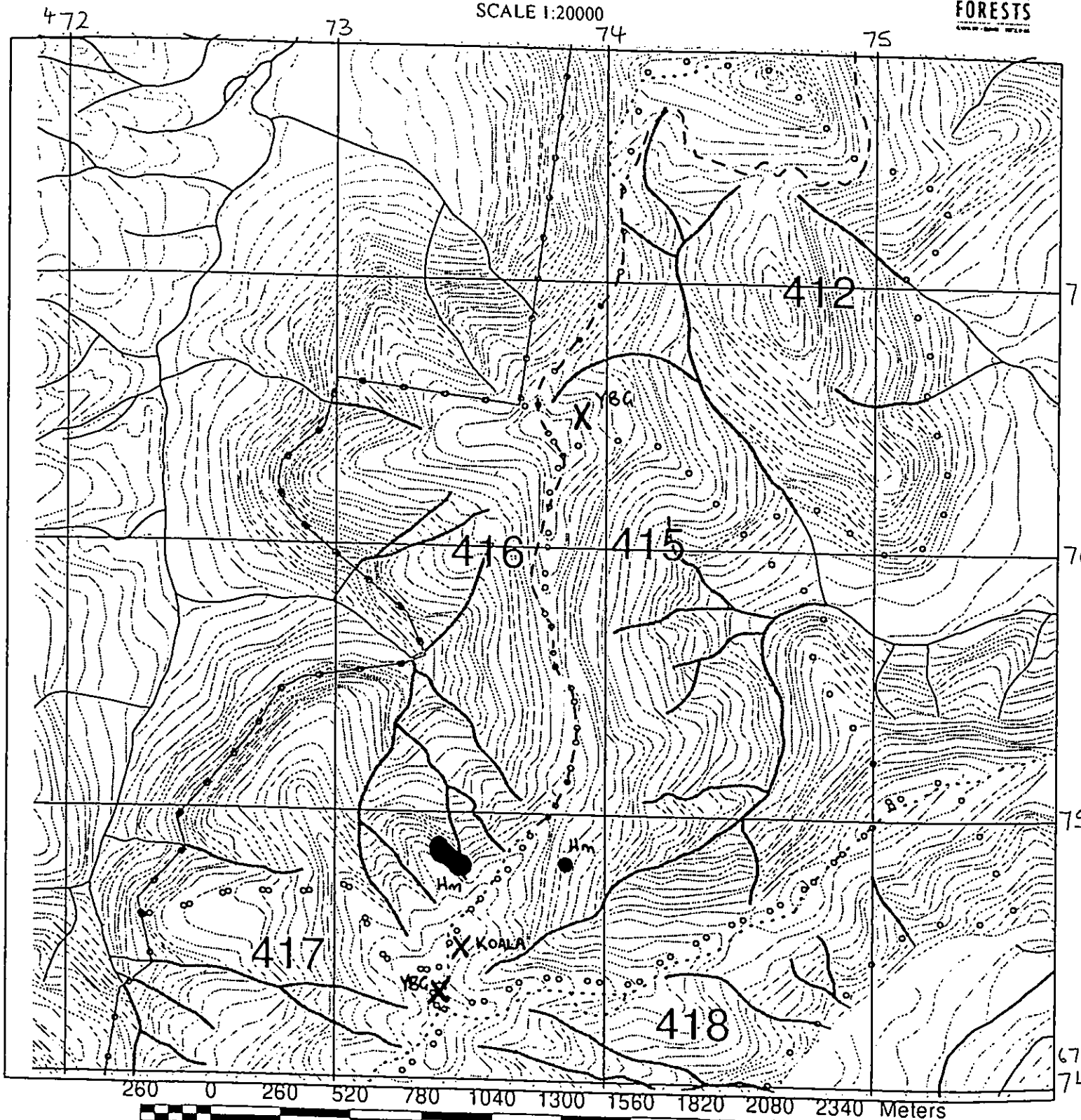
1. Map 1 showing new threatened flora/fauna detections.
2. Map 2 showing Flora traverse surveys (1:25000 F.T.).
3. Map 3 showing spotlight and bat surveys.
4. Map 4 showing call playback, scat/track and koala surveys.

NORTHERN RIVERS REGION
CASINO MANAGEMENT AREA
COMPARTMENT 412, 415, 416
BASE MAP
MOUNT BELMORE STATE FOREST

MAP 1



SCALE 1:20000



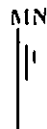
- BOUNDARIES**
- State Forest Boundary
 - Compartment Boundaries
- ROADS (Proposed in Red)**
- Natural Surface
 - == Scaled or Gravelled
 - Four wheel drive

- WATERCOURSES & DRAINAGE**
- External Drainage
 - Internal Drainage

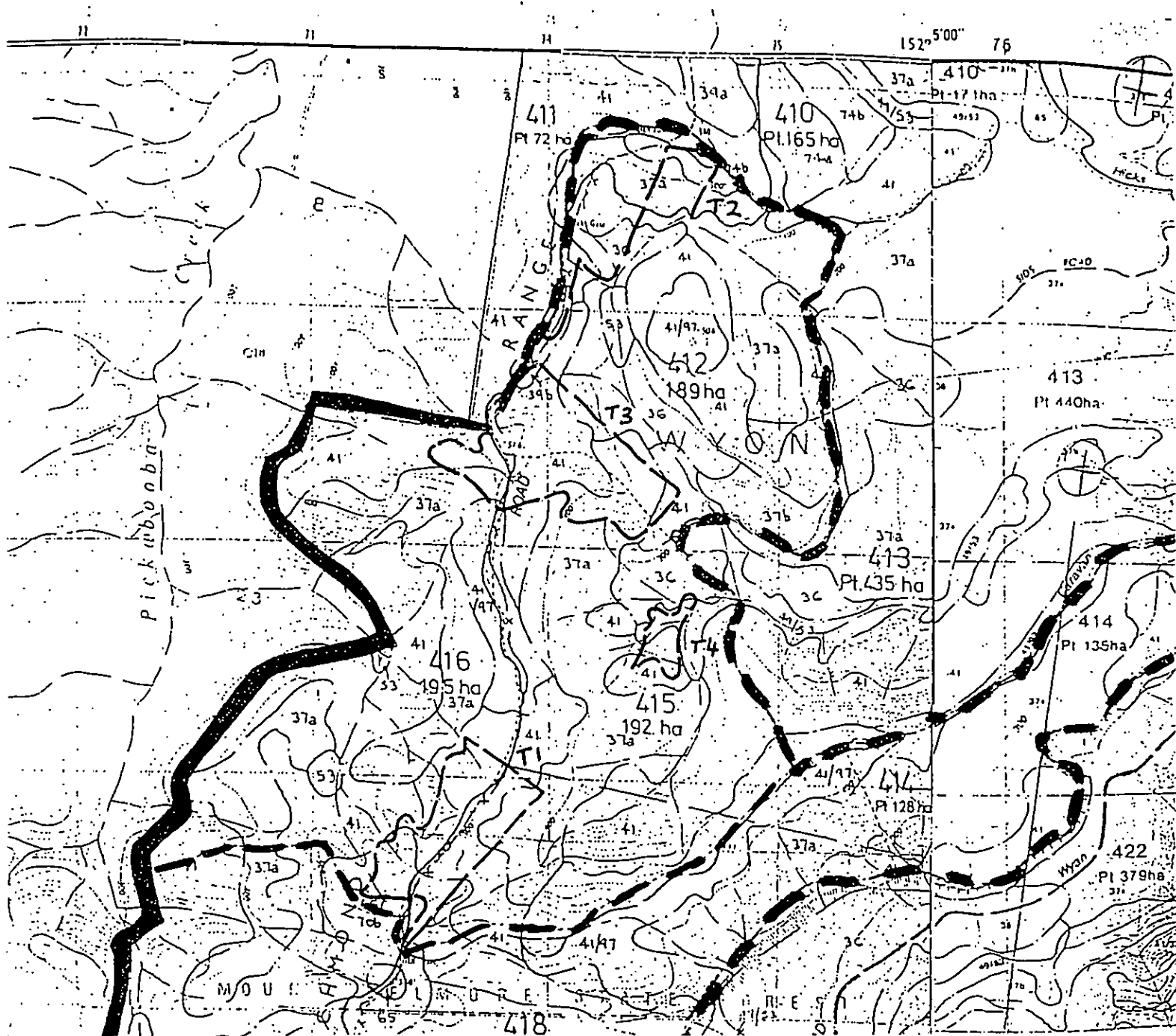
Hm ● AREAS OF *Hibbertia marginata*

YBG X YELLOW-BELLIED GLIDER

KOALA X KOALA



MAP 2

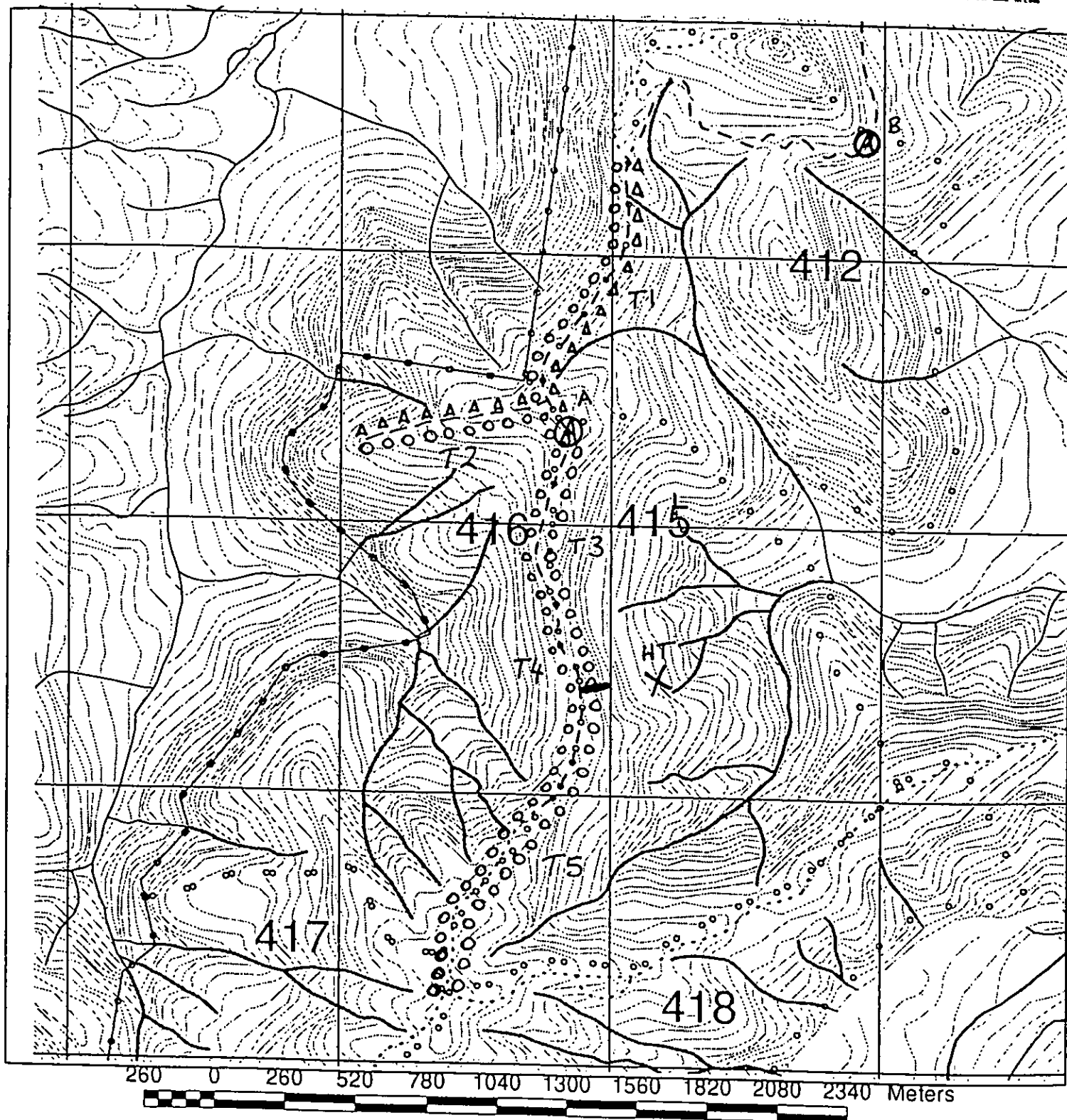


SCALE 1:25000

FLORA TRAVERSE SURVEYS

NORTHERN RIVERS REGION
CASINO MANAGEMENT AREA
COMPARTMENT 412, 415, 416
BASE MAP
MOUNT BELMORE STATE FOREST
SCALE 1:20000

MAP 3

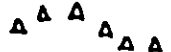


- BOUNDARIES**
 --- State Forest Boundary
 Compartment Boundaries
ROADS (Proposed in Red)
 --- Natural Surface
 --- Sealed or Gravelled
 Four wheel drive

- WATERCOURSES & DRAINAGE**
 --- External Drainage
 --- Internal Drainage



SPOTLIGHT TRAVERSE (WALK)



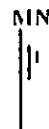
SPOTLIGHT TRAVERSE (VEHICLE)



ANABAT SITE

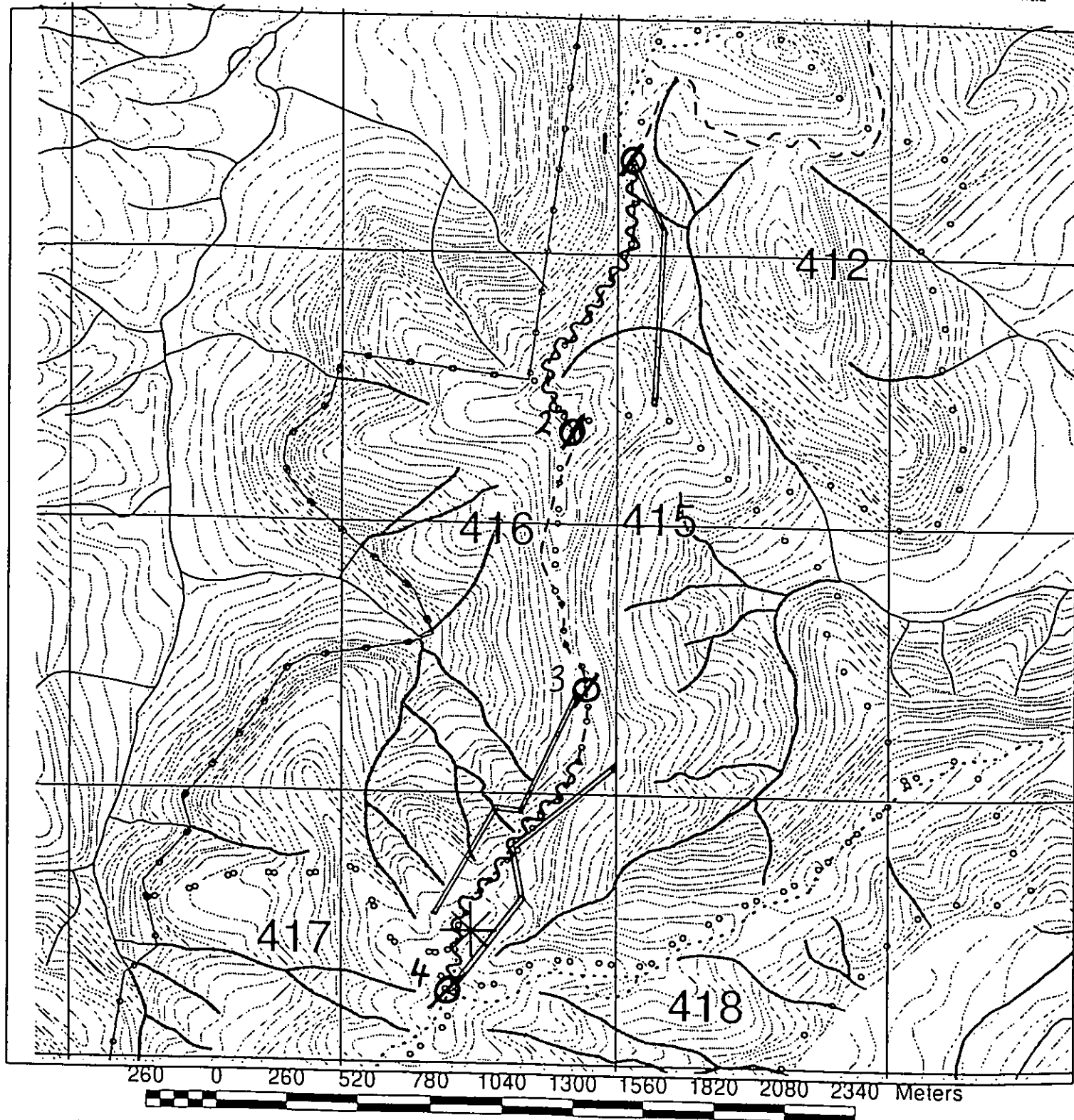


HARP TRAP SITE



NORTHERN RIVERS REGION
CASINO MANAGEMENT AREA
COMPARTMENT 412, 415, 416
BASE MAP
MOUNT BELMORE STATE FOREST
SCALE 1:20000

MAP 4



- BOUNDARIES**
- State Forest Boundary
 - Compartment Boundaries
- ROADS (Proposed in Red)**
- - - Natural Surface
 - == Scaled or Gravelled
 - Four wheel drive

- WATERCOURSES & DRAINAGE**
- External Drainage
 - Internal Drainage

Ø CALL PLAYBACK SITE

W W SCAT/TRACK TRAVERSE

— KOALA TRAVERSE

* KOALA STAR TRAVERSE

NIN