

THREATENED FAUNA MAPSHEET DISPLAY**ELLENDALE 4628****Current as at 29/Jul/2008****Please note, coordinates use map datum GDA94****Known localities**

Species	Tenure	Locality	Notes
tussock grass skink	P	479612 5282683 Water Palls Hill 1km SE	
wedge-tailed eagle	SF	463451 5288103 Repulse River N	nest (#724) active 99
wedge-tailed eagle	SF	472203 5286034 Brown Mountain, Ellendale 2.2km NE	nest (#578)
wedge-tailed eagle	SF	472569 5285968 Brown Mountain, Ellendale 2.4km NE	nest (#571)
wedge-tailed eagle	SF	463712 5287683 Repulse River mid	nest gone (#723)
wedge-tailed eagle	SF	463962 5287433 Repulse River S	nest (#722)
wedge-tailed eagle	SF	469254 5289719 Broad River	nest (#1067)
wedge-tailed eagle	P	471820 5282889 Ironstone Creek	nest (#344)
wedge-tailed eagle	SF	472641 5282764 Ironstone Creek	nest (#345)
white-bellied sea eagle	P	478300 5289140 Mike Howes Gully Lake Meadowbank	nest # 1536

Habitat which may contain threatened species

Species	Habitat
<u>eastern barred bandicoot</u>	Grassy woodlands, native grasslands, mosaics of pasture and ground cover, including shrubby weeds
<u>grey goshawk</u>	Wet eucalypt forest with blackwood/myrtle understorey, blackwood swamp, E. brookeriana wet forest, melaleuca and leptospermum forest.
<u>masked owl</u>	Lowland dry sclerophyll forest with old growth components
<u>quoll (spotted-tailed, eastern)</u>	All wetter forest types, coastal heath and bush-pasture interfaces
<u>tussock grass skink</u>	Lowland <i>Poa</i> tussock grassy woodland and open grassland where there is a good cover of tall to medium tussocks
<u>wedge-tailed eagle</u>	Large tracts (more than 10 ha) of eucalypt or mixed forest
<u>white-bellied sea eagle</u>	Forest with significant old-growth eucalypt component within 5 km of the coast (nearest coast including shores, bays, inlets and peninsulas), rivers, lakes or complex of farm dams

Back

EASTERN BARRED BANDICOOT

Perameles gunnii gunnii

Status

VULNERABLE (Commonwealth *Endangered Species Protection Act 1992*), due to habitat loss and predation.

Description

The eastern barred bandicoot is rabbit-sized and greyish to light brown in colour with three or four very distinctive pale bands or stripes across the rump. The hind legs are longer than the fore legs, producing a bounding gait and enabling the animal to sit upright. Signs of bandicoots being present include small conical nose holes dug in soft soil.



Photo by Hans and Annie Wapstra

Distribution and Habitat

The eastern barred bandicoot is found in Victoria and Tasmania. In Victoria, its range is restricted to a small number of sites. However, the eastern barred bandicoot is relatively widespread and abundant in some parts of Tasmania, although it has significantly declined in its natural habitat throughout the Midlands. It is most common in the southeast and northwest of Tasmania but less common in the northeast, Midlands and east coast. There are no records of the species from the southwest or from altitudes above 950 m.

Eastern barred bandicoots prefer open grassy areas for foraging but require some form of thick ground cover for shelter and nesting. Their native habitat is grassland and grassy woodland dominated by tussocks, reeds and grasses. Eastern barred bandicoots particularly flourish in areas of good quality agricultural land (deep soils, high rainfall) bordered by native bush.

Management Objectives for Production Forest Areas

Any regional management plans should take this species into account.

Any native habitats e.g. grasslands, tussock, grassy paddocks, reeds, heath, etc. with eastern barred bandicoots have high conservation value. Retain as much undisturbed native bush as possible, especially the understorey plants needed for cover and nesting.

Maintain and encourage ground cover. Weeds such as gorse and blackberries provide shelter for bandicoots. However, native plants which form a dense ground cover i.e. saggs (*Lomandra* and *Lepidosperma* spp.), *Gahnia* spp., species of *Acacia*, *Grevillea*, *Hakea*, *Correa*, long native grasses and reeds are particularly suitable.

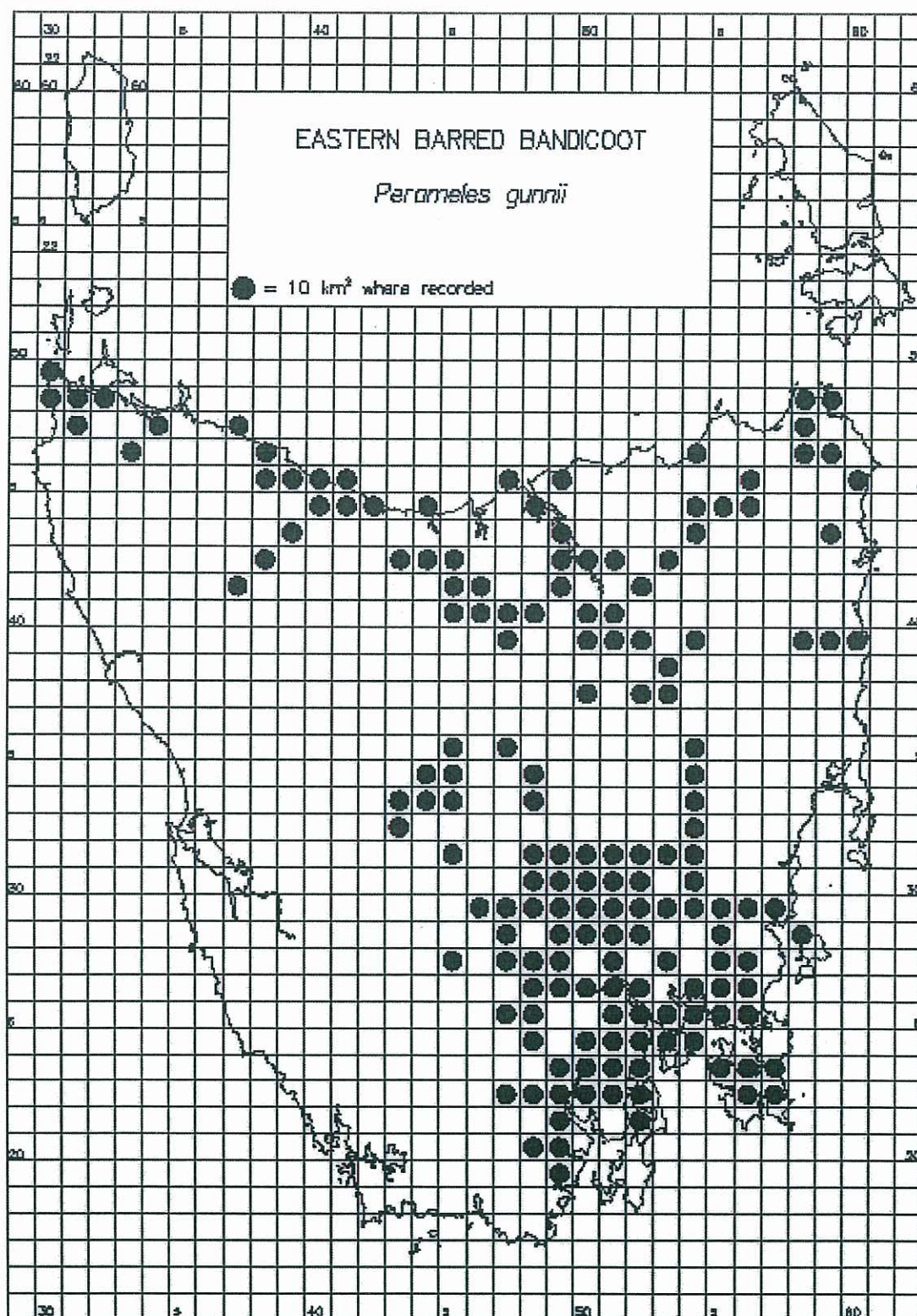
Reading

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Parks and Wildlife Service (1997). *Eastern barred bandicoot*. Threatened Species Information Sheet. Macquarie Street, Hobart, Tasmania.

Specialist

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Source: Bryant and Jackson 1999

GREY GOSHAWK

Accipiter novaehollandiae

Status

ENDANGERED (Tasmanian *Threatened Species Protection Act 1995*), due to low densities and limited breeding distribution. A high proportion of core habitat is in unprotected areas.

Description

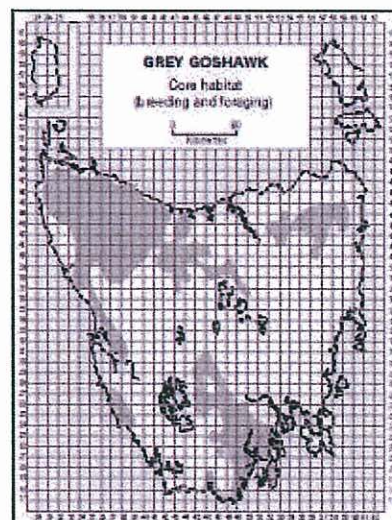
Medium-sized bird of prey. Also called the white goshawk, all Tasmanian specimens are pure white, with yellow legs and black beak. Immature birds have yellow eyes, adults red. Females are cockatoo-sized; males are much smaller.



Distribution and Habitat

This species occurs in mature blackwood swamp forest, wet forest and mixed forest, primarily at lower altitudes. In general, forest with a closed canopy and low stem density is favoured by the birds for nesting. There are less than 110 breeding pairs in Tasmania. Breeding densities are greatest in blackwood swamps and riparian blackwood forest in the north-west. Other areas where breeding occurs are in the north-east, the south-east (including wet parts of Bruny Island), the Mount Field area, the northern side of the Western Tiers, south of Macquarie Harbour and in coastal forest between Macquarie Harbour and the Pieman River.

Potential nesting habitat occurs along watercourses in wet forest with old growth or regrowth older than 50 years, particularly where blackwoods (*Acacia melanoxylon*) occur. Blackwood is a preferred nest tree species followed by *Melaleuca*, myrtle, tea tree and eucalypt. Outside of blackwood swamp forests most nests are in riparian areas, but nests may occasionally be up to 100 m from a watercourse. Nests are always in forest (sometimes in patches less than 5 ha); isolated trees are not used for breeding.



Grey goshawks hunt from a perch in the canopy, so probably require forest with an open structure under the canopy. The precise habitat requirements for foraging are not known, except in blackwood swamp forests where suitable areas have older blackwood and tea-tree with a closed canopy and an open structure under the canopy. Females eat mainly mammals (rodents, ringtail possums, rabbits) and birds such as rosellas, herons and currawongs. The smaller male catches mainly small birds, rodents and insects. Carrion is sometimes eaten.

Management Objectives for Production Forest Areas

- Identify, manage and protect priority breeding habitat.
- Protect known nest sites.
- Identify and maintain networks of foraging habitat.

Reading

Brereton, R. and Mooney, N.J. (1994). Conservation of the nesting habitat of the grey goshawk *Accipiter novaehollandiae* in Tasmanian State forests. *Tasforests* 6: 79-91.

Mooney, N. and Holdsworth, M. (1988). Observations on the use of habitat by the grey goshawk in Tasmania. *Tasmanian Bird Report* 17: 1-12.

Specialist

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DRAFT FOR COMMENT ONLY 2002

MASKED OWL *Tyto novaehollandiae castenops*

Status

ENDANGERED (Tasmanian *Threatened Species Protection Act 1995*), due to the small population size and ongoing habitat loss.

Description

A large owl, weighing up to 1260g, with a wingspan of up to 129cm. Females are larger (43-57cm), than males (35-42cm) and considerably darker. The upperparts of this species are dark brown to light chestnut with white speckling. The prominent facial disc is buff to chestnut coloured with a darker margin and chestnut shading around the eyes. The legs are fully feathered and the feet powerful with long talons (Higgins 1999).

The masked owl is a secretive, relatively silent and strictly nocturnal species, which feeds predominately on introduced rodents and rabbits (on agricultural land) and marsupials and native birds in less disturbed habitats.

Masked owls form monogamous pairs, nesting in tree hollows with decaying debris. The female is fed by the male and incubates 2-4 eggs, which hatch in about 42 days. Young are covered in white down, then a creamy down, and are fledged in 10-12 weeks. Fledged masked owls have only traces of down and remain in the nest vicinity for several weeks. Breeding is seasonal in Tasmania with most egg laying in late October to early November (Higgins 1999).

Distribution and Habitat

T. n. castenops is endemic to Tasmania and has been recorded from all areas apart from the southwest. Most records are from lowland, dry sclerophyll forest in the south east and central north of the state, although the masked owl has been recorded in wet eucalypt forest, non-eucalypt dominated forest, scrub and urban environments. The preferred habitat is close to the forest edge where there is a complex mosaic of understorey components. Home range is large and may be in excess of 1000ha (Bell *et al.* 1997).

Eucalypt forests and woodland containing old growth trees or isolated old-growth trees containing large hollows are essential for breeding. Roost sites are usually in trees (among dense foliage or in tree hollows), cliffs (overhangs, potholes and caves) and occasionally human-made structures such as farm sheds and open buildings (Bell *et al.* 1997).

Important Locations

The east coast between St Marys and Hobart, the Huon and Derwent Valleys, mid north coast and small fragmented patches in the Tamar Valley and the northeast coast have been identified as important for breeding (Bell *et al.* 1997).

Threats, Limiting Factors and Management Issues

There is some evidence that indicates a decline in masked owl numbers may have occurred since European settlement. The preferred habitat of the masked owl is dry forest and woodland on the coastal and sub-coastal lowlands in the north, north-east, east and south-east. These vegetation communities have been extensively cleared in the past for agriculture, forestry and residential development.

This habitat is also poorly reserved, less than 10% of the masked owls' preferred habitat is in dedicated reserves (Bell *et al.* 1997).

A significant threat to the masked owl is ongoing loss of old growth eucalypt forest, nesting habitat, from commercial timber harvesting, land clearance, tree felling for firewood and natural attrition of old growth trees. Competition for nest hollows by feral honeybees, introduced kookaburras, and increasing numbers of brushtail possums may contribute to the decline in breeding success (Bell *et al.* 1997).

Deaths from collisions with vehicles, fences or power poles and electrocution on powerlines may also be a significant source of mortality for this subspecies (Bell *et al.* 1997).

Conservation Assessment

Historical Distribution

The Tasmanian masked owl has been recorded from throughout northern, eastern and north-western Tasmania, including Maria and Bruny Islands.

Population Estimate

The number of masked owls present in Tasmania based on estimates of home range size and the area of suitable owl habitat is estimated at 1300 mature individuals (Bell *et al.* 1997).

Assessment Criteria

T. n. castenops meets the criteria for listing as Endangered on the *Threatened Species Protection Act 1995* because the population is less than 2500 individuals and there is an ongoing loss of habitat.

Recovery Program

Objectives

- Maintain the size of the existing population of the masked owl and to improve the quantity and quality of habitat.

Actions Needed

- Undertake surveys throughout preferred habitat, including production forest on private and public land, to identify distribution, density, nest sites, assess home range size and habitat utilisation.
- Protect known nesting, roosting and priority foraging habitat from clearing, particularly old growth forest.
- Place all Masked Owl known nesting sites that are on public land under secure conservation management.
- Control and reduce firewood collection from areas occupied by masked owls.
- Undertake a public information and education.
- Promote revegetation and land reclamation that recreates woodland habitat with a full complement of biodiversity, including the owl.
- Investigate changes in prey abundance resulting from habitat fragmentation and forestry operations in the core range of the species.
- Prepare and implement a recovery plan for the species.

Management Objectives in Production Forest Areas

- Maintain nesting habitat in areas considered to be important for this species.
- Maintain a network of foraging and nesting habitat throughout the range of the masked owl.

- Standardised surveys for masked owls and suitable nesting habitat should be undertaken prior to logging within the species' preferred range (i.e. old-growth lowland dry sclerophyll forest and woodlands in the southeast, east, northeast and north) to identify the species' presence and locality of nest sites.

Reading

- Bell, P., Mooney, N, and Wiersma, J. (1997). Predicting the essential habitat for forest owls in Tasmania. Australasian Raptor Association Report to the RFA Environment and Heritage Technical Committee, Hobart.
- Bell, P.J. and Mooney, N. (2002). Distribution, habitat and abundance of masked owls (*Tyto novaehollandiae*) in Tasmania. Pp. 120-132 in *Ecology and Conservation of Owls*. Eds Newton, I., Kavanagh, R., Olsen, J. and Taylor, I.
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- Garnet S.T. and Crowley, G.M. (2000) The action plan for Australian birds 2000. Environment Australia, Canberra.
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- Thomas, D. (1979) Tasmanian bird atlas. Fauna of Tasmania Committee, Hobart.
- Watts, D. (1999) Field Guide to Tasmanian Birds. New Holland Publishers (Australia), Sydney.

Specialists

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QUOLL SPECIES

Dasyurus viverrinus (eastern quoll)

Dasyurus maculatus maculatus (spotted-tailed quoll)

Status

Spotted-tailed quoll

VULNERABLE (Commonwealth *Endangered Species Protection Act 1992*), due to habitat loss, predation and persecution. While it occurs throughout Tasmania, the spotted-tailed quoll is uncommon and naturally occurs at very low densities.

Eastern quoll

The eastern quoll has been listed in the Regional Forest Agreement as a Priority Species Requiring Consideration (Attachment 2 Part B), due to due to habitat loss, and persecution. While it occurs throughout Tasmania, the eastern quoll is uncommon and naturally occurs at very low densities.

Description

Spotted-tailed quoll

The spotted-tailed quoll is a medium-sized carnivore, weighing between 1.6-5.0 kg. The thick, short fur is golden to red to dark chocolate brown on the back and pale cream on the belly. There are distinct white spots of varying size over the back, head and along the long tail. The Tasmanian spotted-tailed quoll is genetically distinct from the mainland species and therefore needs to be managed as a separate entity.

Eastern quoll

The eastern quoll is smaller (0.7-2.0 kg) and more finely built than the spotted-tailed quoll. Fur colour is either grey to brown or a jet black with both colour types having white spots covering the head and body, but not the tail.

Distribution and Habitat

Spotted-tailed quoll

Spotted-tailed quolls occur throughout Tasmania and also in eastern Australia from Queensland to Victoria. On mainland Australia, they have declined dramatically and now Tasmania remains their stronghold. The spotted-tailed quoll is primarily a forest-dwelling species, most abundant in higher rainfall areas containing rainforest, wet forest and blackwood swamp forest. They are known to utilise regrowth forest. The spotted-tailed quoll is solitary and territorial with a large home range.

The area of highest probability of occurrence is a broad band across northern Tasmania from the northwest corner to the Waterhouse area, north of the escarpment of the Central Plateau. This area correlates with high seasonality of rainfall (i.e. the species appears dependent on the most productive environments).

Important habitat components appear to be structurally complex forest, old growth forest with tree hollows and coastal scrub (such areas provide opportunities for arboreal hunting and avoidance of Tasmanian devils which compete for prey). Spotted-tailed quolls appear to disappear in highly fragmented environments and where canopy cover is reduced by over 50%.

Home ranges (non-mating season) are large (in the order of 20 square kilometres for males and 10 square kilometres for females) and female ranges virtually exclusive for large parts of the year. These two attributes contribute to low natural population densities and natural rarity. This means this species is vulnerable to population decline.

The following areas are regarded as key sites for the species: forested areas of the north bounded by Wynyard, Gladstone and the central and northeastern highlands; northwest wet forests, encompassing the entire catchments of the Arthur and Montagu Rivers; dry eucalypt forests in the central north coast area bounded by the Tamar, Devonport and the Western Tiers (Dazzler Range, Wurra Wurra Hills); patches between the King River and Strahan; the Gordon River and Huon River catchments; and the coastal strip from Strahan to Temma.

Eastern quoll

Eastern quolls became extinct on mainland Australia by the mid 1960s but remain locally abundant in a wide range of habitats in Tasmania. They are most common in the dry eastern half of Tasmania at low to medium altitudes. The species has a patchy distribution across Tasmania but is more predominant in the eastern half of the State in areas of lower mean annual rainfall. They particularly flourish in agricultural areas where there is a bush-pasture interface, coming onto pastures at night to hunt for rodents and insects. Eastern quolls do use wetter forests but mainly for denning. Cover is probably important for predator protection, especially in juveniles. "Hot" spots include the Huon, Cygnet, Cradoc area, the Buckland, Triabunna, Lake Leake area, and the northeast around Scottsdale and Ringarooma.

The eastern quoll is solitary and non-territorial with a home range varying from 50 ha on agricultural land to several square kilometres.

Management Objectives for Production Forest Areas

Spotted-tailed quoll

One of the key threats for the species is widespread native vegetation clearance, especially clearfelling and conversion to plantation leading to loss of high quality, structurally complex old growth forest. This can eliminate den sites and the diversity of prey items. Regeneration forest and plantations are not likely to provide high quality habitat. The species may be susceptible to secondary poisoning from small 1080 poisoned carcasses (e.g. rabbits, small possums).

Retention of some high quality habitat requirements has been achieved on public land through the Regional Forest Agreement and current Forest Practices Code provisions for State forest.

Conservation requirements need to be addressed at the landscape level due to the low population densities and large home range requirements. Regional management planning should be developed for both species to ensure that large corridors, on the scale of 100 square kilometres (e.g. biodiversity spines) of suitable native forest habitat are retained across the landscape, particularly in key sites.

The network of contiguous informal reserves (i.e. wildlife habitat strips, wildlife habitat clumps, streamside reserves and goshawk habitat reserves) throughout these areas should provide some habitat for this species.

Areas with a natural diversity of refuge sites such as fallen logs, dense understorey and rocks represent suitable habitat. Such areas can be retained in a network of contiguous informal reserves (e.g. wildlife habitat strips, wildlife habitat clumps, streamside reserves).

Eastern quoll

One of the key threats for the eastern quoll is widespread native vegetation clearance, especially clearfelling and the conversion of pasture to plantation. This can eliminate den sites and the diversity of prey items. Road deaths in areas of high densities can also have a significant effect.

The principle management for these species should be to ensure that large corridors (on the scale of 100 square kilometres) of suitable native forest habitat are retained across the landscape, particularly in key sites.

In addition areas with a natural diversity of refuge sites such as fallen logs, dense understorey, rocks and wombat burrows should be protected or left undisturbed. Such areas can be retained in a network of contiguous informal reserves (i.e. wildlife habitat strips, wildlife habitat clumps, streamside reserves).

Reading

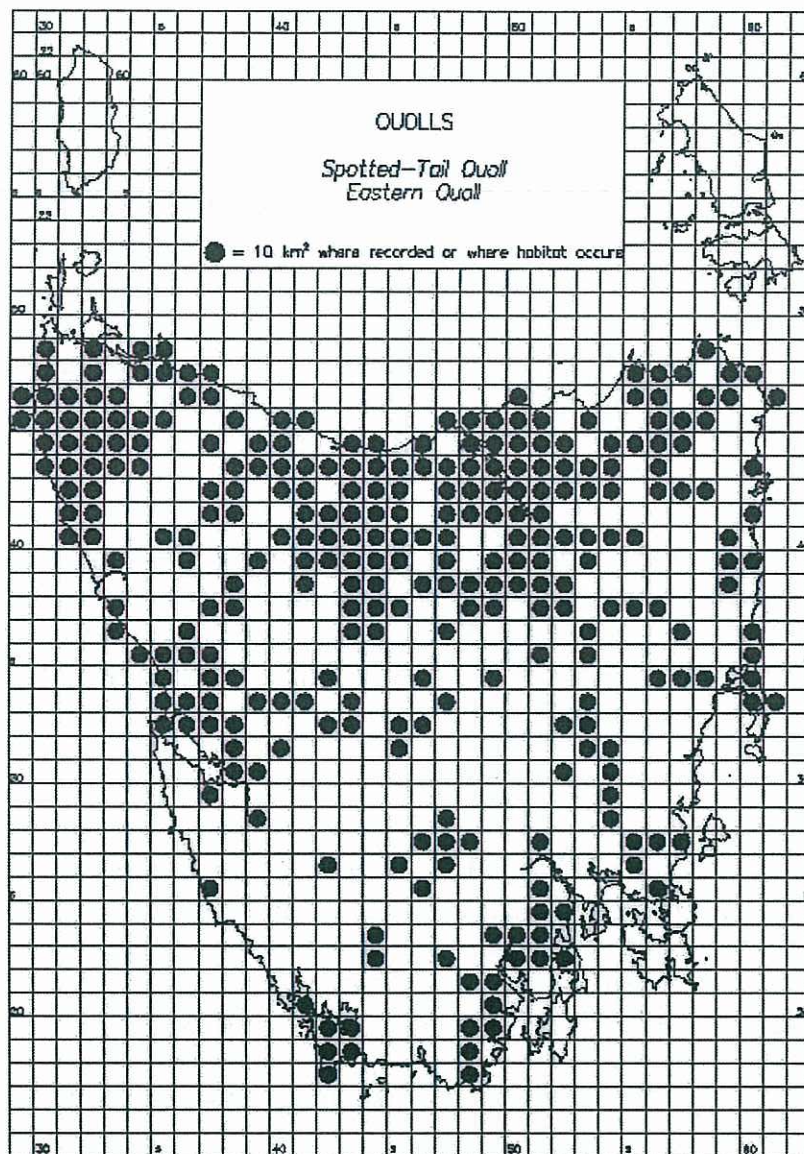
Jones, M.E. and Rose, R.K. (1996). *Preliminary assessment of distribution and habitat associations of the spotted-tailed quoll (Dasyurus maculatus maculatus) and eastern quoll (D. viverrinus) in Tasmania to determine conservation and reservation status*. Report to the Tasmanian RFA Environment and Heritage Technical Committee.

Watts, D. (1993). *Tasmanian Mammals*. Revised edition. Peregrine Press, Kettering, Tasmania.

Specialist

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Source: Bryant & Jackson 1999

DRAFT FOR COMMENT ONLY

TUSSOCK GRASS SKINK

Pseudemoia pagenstecheri

Status

ENDANGERED (Tasmanian *Threatened Species Protection Act 1995*), due to the severely fragmented population, low number of individuals and habitat loss and degradation.

Description

A smooth scaled skink with rather short legs and paired frontoparietal shields. Males have a head and body length of up to 55mm and females up to 68mm. This species pale grey, grey-brown to olive dorsally without metallic lustre. A narrow, but distinct vertebral line is always present, with an additional pair of narrow dark lines on each side of the back in some specimens. There is also a narrow straw coloured-white dorsolateral line which forms the upper margin of a dark brown upper lateral zone, which fades ventrally to be edged by an off-white (orange in males) midlateral line which lacks a distinct dark lower edge. The underside is white to pale yellow (Hutchinson *et al* 2001).

P. pagenstecheri mates in late summer to autumn and gives birth to 3-11 live young (Hutchinson *et al.* 2001).

Distribution and Habitat

P. pagenstecheri is known from NSW, Victoria and Tasmania. In Tasmania it is known from only 7 remnant grassland areas in the midlands, from a single population on the Hobart Domain, and a single population on private property near Ellendale.

P. pagenstecheri is restricted to lowland *Poa* tussock grassy woodland and open grassland, where there is a good cover of medium to tall tussocks. It shelters inside the bases of tussocks and basks inconspicuously in the spaces between them (Hutchinson *et al.* 2001).

Important Locations

- Australian Defence Force Small Arms Range Complex, Pontville.
- Lake Dulverton, Oatlands.

- Township Lagoon, Tunbridge.
- "Fosterville" Ross.

Threats, Limiting Factors and Management Issues

Degradation of Tasmania's native grasslands appears to be the primary cause of decline in this species. Many native grasslands have been destroyed or severely degraded since European settlement and most of those grasslands that remain are on private land and are subject to heavy grazing pressure (Kirkpatrick 1999). Trampling and grazing of tussocks by sheep and cattle has the effect of shortening the grasses between the tussocks and may lead to loss of habitat and increase risk of predation of this species due to the lack of cover. Some very small remnants do survive clearance on soils too rocky to plough. However, even these remnants can be severely degraded by fertilising and sowing with preferred species such as clover, inappropriate fire regimes and invasion by introduced weeds such as gorse.

There is only one known reserved population of *P. pagenstecheri* in the Tunbridge Township Nature Reserve, a 16 hectare area of native grassland including an ephemeral lagoon.

In addition, *P. pagenstecheri* appears to have disappeared from areas where it previously occurred; 2 of the 11 populations present in 1983 could not be relocated during surveys in 1999 (Redburn 1999), suggesting that there is a continuing decline in this species.

Conservation Assessment

Historical Distribution

Unknown.

Population Estimate

There are currently nine known populations containing an unknown number of individuals.

Assessment Criteria

P. pagenstecheri meets the criteria for listing as Endangered on the *Threatened Species Protection Act 1995* given that the population is severely fragmented, contains a low number of individuals and the remaining pockets of suitable habitat are vulnerable to clearing and degradation.