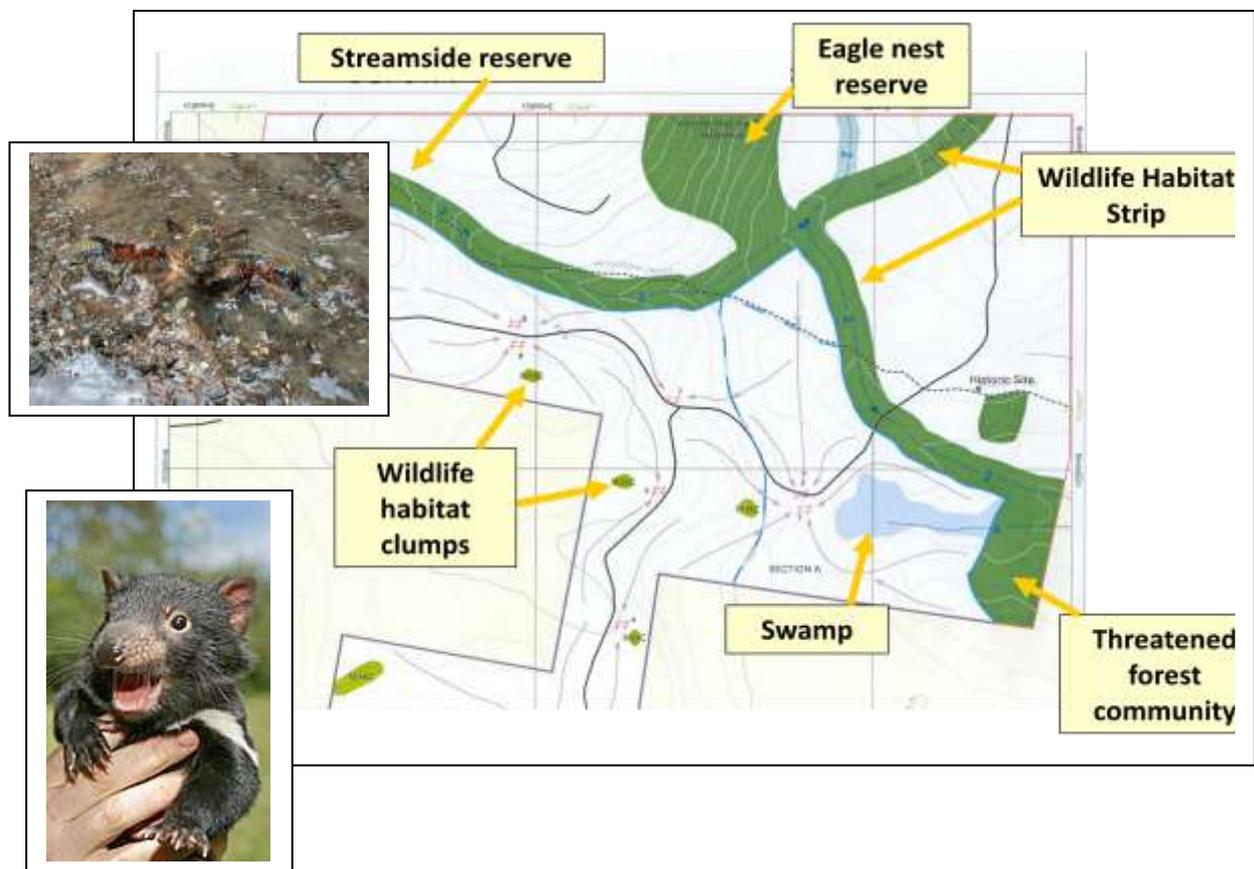


Procedures for the management of threatened species under the forest practices system: Report on implementation during 2012–13



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Report to the Board of the FPA and the Secretary of DPIPWE

August 2013

Front page photograph: Forest Practices Plan incorporating areas retained to meet management objectives for threatened species. Tasmanian devil and Giant freshwater crayfish (FPA library)

Citation

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Summary

- The *Agreed Procedures* are the mechanism by which the requirements for the management of threatened species under the *Threatened Species Protection Act 1995* and the Forest Practices Code are delivered through the Tasmanian forest practices system.
- Clause 9 of the *Agreed procedures* requires an annual report of implementation of the *Agreed Procedures*. This report covers the 2012/13 period.
- DPIPWE completed a draft of the strategic plan for the swift parrot, listing statements and launched the TSLink in 2012/13.
- DPIPWE and FPA collaborated on modifications to the Threatened Fauna Adviser following feedback from the Forest Practices Advisory council and TSSAC and the Botany course for planners.
- FPA provided advice on management recommendations for threatened species for 113 notifications in 2012/13. The majority of advice requests were for the management of habitat for the masked owl, wedge-tailed eagles, swift parrot, grey goshawk, spotted-tailed quoll and devil.
- One formal consultation relating to the management of devil and eagle habitat for a private land conversion proposal was submitted to PCAB, DPIPWE.
- Three investigations relating to threatened species were undertaken by the FPA Compliance Program in 2012/13.
- A report on the implementation of strategic landscape-scale recommendations (delivered through the 2002 ThrFA) for the management of habitat for the keeled snail and grey goshawk in the Togari forest block showed that in general these ‘strategic’ recommendations have been met.
- DPIPWE and FPA have been involved in a number of research and monitoring projects relating to threatened species management (swift parrot, burgundy snail, wedge-tailed eagle, spotted-tailed quoll) in areas covered by the Forest Practices System. The reports and publications from these studies are available via the FPA web-site.
- A major report on the effectiveness of the wedge-tailed eagle management actions was completed in 2012/13. This study suggests that the current management actions are effective at minimising impacts on breeding wedge-tailed eagles and help to ensure nesting success.

Background

The *Agreed Procedures* are the mechanism by which the requirements for the management of threatened species under the *Threatened Species Protection Act 1995* and the Forest Practices Code are delivered through the Tasmanian forest practices system.

The Forest Practices Code states that:

‘Threatened species will be managed in wood production areas **in accordance with procedures agreed between the Forest Practices Board and DPIWE**. The *Agreed Procedures* will include the development of endorsed management prescriptions through consultation among landowners, Forest Practices Officers and specialists within the Board and DPIWE.’

The *Agreed Procedures* were introduced in 2000 and incorporated into the *Forest Practices Code (2000)*. The FPA and DPIPWE revised the procedures in 2010.

Clause 9 of the *Agreed procedures* requires an annual report of implementation of the *Agreed Procedures*. This report covers the 2012/13 period and contributes to meeting recommendation 16 of the second five-yearly review of progress with implementation of the Tasmanian Regional Forest Agreement (Ramsey, 2008)

Report on implementation

(A) *Roles and responsibilities*

• *Joint roles and responsibilities of the FPA and the DPIPWE*

a. *The Forest Practices Authority (FPA) and the Department of Primary Industries, Parks, Water and Environment (DPIPWE) will cooperate on the development of procedures, tools, objectives, endorsed management prescriptions and training for the management of threatened species within forests and/or threatened non-forest vegetation types at both the strategic (landscape) level and at the operational (forest practices plan) level.*

- This revised web-based Threatened Fauna Adviser was provided to the Board of the Forest Practices Authority and Secretary of DPIPWE for endorsement in June 2012 (consistent with clause 3.3 of the *Agreed Procedures*). FPA Biodiversity program staff and staff from the Threatened Species and Marine Conservation Section of DPIPWE continued to collaborate on the review of the Threatened Fauna Adviser in response to advice received from FPAC and TSSAC.
- The FPA Biodiversity program and Threatened Species and Marine Conservation Section of DPIPWE collaborated in the running of a Botany course for forest planners and others involved in natural resource management such as local government, NRM and environmental consultants. This course (Flora course II) is part of the Forest Practices Officer course and covered the ecology and management of threatened fauna species. It is a pre-requisite for forest planners wishing to upgrade from FPO inspecting to FPO planning certification.
- The FPA Biodiversity program and Threatened Species and Marine Conservation Section of DPIPWE continued to collaborate on the RFA priority species project funded through the Commonwealth, Caring for Our Country program. A strategic plan for the threatened swift parrot and biodiversity landscape planning guideline were the two main outputs from this project.
- Staff from the FPA and Threatened Species and Marine Conservation Section of DPIPWE collaborated on the revision of range boundaries and habitat descriptions for threatened species delivered through the Natural Values Atlas and FPAs Biodiversity Values Database.

b. *The FPA and the DPIPWE will liaise on any cases that may lead to applications under Part 5 (Conservation Covenants) of the Nature Conservation Act 2002 relating to the refusal or amendment of applications for forest practices plans for the purpose of protecting a threatened species. Where such cases proceed to a tribunal, the FPA and the DPIPWE will cooperate in providing evidence to the tribunal.*

- There were no cases in 2012–13.
- FPA staff provided advice to DPIPWE on compensation claim issues that have arisen from past FPP refusals.

• *Primary roles and responsibilities of the DPIPWE*

a. *Developing strategic plans and other strategic instruments for the management of threatened species as prescribed in legislation, plans and policies for which the department is responsible.*

- Threatened Species and Marine Section, DPIPWE with assistance from FPA completed a draft species strategic plan for the swift parrot in 2012–13 which is intended to provide strategic guidance for the conservation management of Swift Parrot breeding habitat across all spatial scales and land tenures, and land use planning and approval processes in Tasmania. A final draft of this plan has been completed.

- TS&M has finalised a recovery plan for threatened stag beetles that covers five species (including Simons stag beetle, Bornemisszas stag beetle, Vanderschoors stage beetle, broad-toothed stag beetle and Mt Mangana stag beetle) and a multi species recovery plan for orchids has been completed. Both plans will be advertised for public comment in 2013-14. DPIPWE and DSEWPaC have considered public comments on the draft. The Tasmanian devil recovery plan has been reviewed taking into account public comments received and revised threat risks and recovery action priorities have been developed. A workshop was convened by DPIPWE to undertake a threat risk assessment and relate threat risk rankings to recovery action rankings. Following the finalisation of the results of this process the draft recovery plan will proceed through Tasmanian and Australian government processes for final endorsement.
- The Threatened Species link was launched by DPIPWE in 2012/13. The Threatened Species Link is a web based information and planning tool providing current and easily accessible advice for the general public on the conservation and management of threatened species. It directs those interested in undertaking 'forestry' activities to the FPA web-site.
- TS&M prepared listing statements for 15 fauna species during 2012-13 all of which were invertebrates. A further 13 remain in draft form including: giant freshwater lobster, golden galaxias, Great Lake paragalaxias, shannon paragalaxias, authurs paragalaxias, clarence galaxias, pedder galaxias, saddles galaxias, swamp galaxias, western galaxias, grey goshawk, King Island scrubtit, King Island brown thornbill and spotted tailed quoll.
- A Working Group was convened by TS&M to prepare advice on offset priorities for Wedge-tailed eagles for use in Commonwealth and State regulatory processes. FPA provided specialist input into this process.

b. Co-ordinating and participating in research and monitoring of the impacts of land use activities and other factors on the maintenance of habitat and populations of threatened species.

- Threatened Species and Marine Conservation Section and broader DPIPWE undertook habitat and/or population monitoring for the following RFA priority species: New Holland mouse, Tasmanian devil, swift parrot, ptunarra brown butterfly, chaostola skipper, miena jewel beetle, orange bellied parrot, forty-spotted pardalote, and a large number of threatened flora species (to varying degrees) in 2012-13.

- ***Primary roles and responsibilities of the FPA***

a. Organising and coordinating training in threatened species and the use of the planning tools for Forest Practices Officers and others involved in the forest practices plan (FPP) planning process.

- FPA staff organised and coordinated the Flora I and II courses over a four-day period in Hobart, Launceston and various field locations in September 2012. These courses are prerequisites for attendance at an FPO training course and were run in collaboration with staff from the Threatened Species and Marine Section (TSS) of DPIPWE and consultant botanists. The first part of the course (Flora course I – 1 day) covers planning procedures and tools. The second part (Flora course II – 1 day) focussed on species of high conservation significance (threatened species) and the rationale behind current Code provisions. This course also covered the use of the relevant planning tools (Biodiversity Values Database and Botany manuals) and how to implement management recommendations. This course is recognised as an important requirement for persons seeking appointment as FPO Planning officers. Forest planners and natural resource managers from local councils or NRM organisations attended the courses.
- Other training undertaken by FPA staff relating to threatened species management in areas covered by the forest practices system included –
 - Planning tool update for Gunns FPOs, 0.5 day, September 2012

- Briefings for NRM groups and NGOs on planning tools, short presentations, various times
- Field session on the Masked owl, FT Huon District, February 2013
- Eagle nest management training course, Nov 2012
- Quoll, devil and goshawk habitat field day, three one day field days in NE,NW and SE. All planners and other natural resource managers, August 2013.
- Swift parrot field day update for Huon, October 2012

b. Assessing notifications lodged as part of the FPP planning process as required to ensure that the planned operations are in accordance with the requirements of the Forest Practices Code and associated planning procedures.

- FPA staff processed approximately 113 notifications from Forest Practices Officers and other forest planners requesting advice on flora and/or fauna issues as part of the FPP development process between 1 July 2012 and 30 June 2013. Of these, 86 were on State forest, with the remainder a mix of private operations. Field assessments were undertaken for about 33 per cent of notifications.
- The FPA compliance program assessed 30 FPPs covering the full range of forest operations in 2011–12 as part of the annual compliance audit. The results of this audit are in Appendix 3 of the FPA annual report.
- Compliance questions relating to threatened species, used in the FPA annual audit of 5% of FPPs, were reviewed and updated in 2012/13.

c. Developing and providing site-specific management advice for forest practices plans where the planned operations are not covered by endorsed management prescriptions. This may involve consultation with relevant specialists within the DPIPW and other organisations where specific expertise is required.

- As indicated in 3(b) FPA Biodiversity Program staff processed 113 notifications for advice on threatened flora and/or fauna issues as part of the FPP development process in 2012/13. Of these, 86 were on State forest, with the remainder a mix of private operations (see FPA Annual report). Field assessments were undertaken for about 33 per cent of notifications. DPIPW specialists and specialists from the Inland Fisheries Service were consulted when specific expertise was required.
- Tables 1 and 2 provide the number of requests for advice for threatened flora and fauna species, respectively. As in 2011/12, the majority of biodiversity evaluations done as part of the development of a Forest Practices Plan resulted in notifications to the FPA (requests for advice on management actions). This was primarily because the 2002 Threatened Fauna Adviser is out of date and no longer relied upon by most planners and because the revised Threatened Fauna Adviser (2012) is not currently endorsed for use by planners. Therefore, advice on management actions for threatened species was generally delivered on a case by case basis, based on best available information, by staff of the FPA in 2012/13.
- The highest number of requests for advice were for management issues relating to the grey goshawk, wedge-tailed eagle, swift parrot, spotted tailed quoll, Tasmanian devil and masked owl. Requests for advice on the giant freshwater crayfish and the bandicoot dropped in 2012/13, possibly as a result of training session run for FPOs by FPA and TSMS staff.

- The majority of requests for advice were for clearfelling native forest operations (Table 3).
- One formal consult was sent to the PCAB of DPIPW for policy advice on the VDL conversion proposal.

Table 1. Number of requests for advice for threatened flora species (Note that 83 notifications had no data).

Flora	Total Notifications
Acacia axillaris - midlands wattle	3
Acacia pataczekii - wallys wattle	1
Acacia ulicifolia - juniper wattle	1
Aphelia gracilis - slender fanwort	1
Arthropodium strictum - chocolate lily	1
Bertya tasmanica subsp. tasmanica - tasmanian bertya	1
Brunonia australis - blue pincushion	1
Colobanthus curtisiae - grassland cupflower	1
Cyathodes platystoma - tall cheeseberry	1
Cynoglossum australe - coast houndstongue	1
Desmodium gunnii - slender tick trefoil	1
Epacris curtisiae - northwest heath	1
Epilobium pallidiflorum - showy willowherb	1
Eucalyptus radiata subsp. radiata - forth river peppermint	1
Glycine microphylla - small-leaf glycine	1
Hypolepis distans - scrambling groundfern	1
Hypolepis muelleri - harsh groundfern	1
Ozothamnus lycopodioides - clubmoss everlastingbush	1
Pimelea curviflora var. gracilis - slender curved riceflower	1
Pimelea flava subsp. flava - yellow riceflower	2
Pomaderris intermedia - lemon dogwood	1
Prasophyllum stellatum - ben lomond leek-orchid	2
Ranunculus pumilio var. pumilio - ferny buttercup	1
Ranunculus sessiliflorus var. sessiliflorus - rockplate buttercup	1
Schenkia australis - spike centaury	1
Scleranthus fasciculatus - spreading knawel	1
Senecio squarrosus - leafy fireweed	1
Senecio velleioides - forest groundsel	2
Teucrium corymbosum - forest germander	1
Thelymitra holmesii - bluestar sun-orchid	1
Thismia rodwayi - fairy lanterns	2

Table 2. Number of requests for advice for threatened fauna species (Note that 53 notifications had no data).

Fauna	Notifications
Acanthiza pusilla archibaldi - Brown Thornbill (King Island)	1
Accipiter novaehollandiae - Grey Goshawk	13
Alcedo azurea diemenensis - Azure Kingfisher	3
Antipodia chaostola - Chaostola Skipper	1
Aquila audax fleayi - Wedge-tailed Eagle	23
Astacopsis gouldi - Giant Freshwater Crayfish	6
Beddomeia phasianella - Hydrobiid Snail (Keddies Creek)	1
Beddomeia ronaldi - Hydrobiid Snail (St. Patricks River)	1
Catadromus lacordairei - Catadromus Carabid Beetle	1
Charopidae Skemps - Skemps Snail	1
Dasyurotaenia robusta - Tapeworm (Tasmanian Devil)	1
Dasyurus maculatus maculatus - Spotted-tail Quoll	15
Dasyurus viverrinus - Eastern quoll	6
Engaeus orramakunna - Mt. Arthur Burrowing Crayfish	1
Engaeus yabbimunna - Burrowing Crayfish (Burnie)	1
Haliaeetus leucogaster - White-bellied Sea-Eagle	8
Helicarion rubicundus - Burgundy Snail	2
Lathamus discolor - Swift Parrot	13
Limnodynastes peroni - Striped Marsh Frog	1
Lissotes menalcas - Mt. Mangana Stag Beetle	5
Litoria raniformis - Green and Golden Frog	2
Oreisplanus munionga larana - Marrawah Skipper	2
Oreixenica ptunarra - Ptunarra Brown Butterfly	4
Oxyethira mienica - Caddis Fly (Ouse River)	1
Perameles gunnii gunnii - Eastern-barred bandicoot	8
Prototroctes maraena - Australian Grayling	2
Pseudemoia pagenstecheri - Tussock Skink	3
Sarcophilus harisii - Tasmanian devil	22
Schayera baiulus - Schayer's Grasshopper	1
Tasmanipatus barretti - Giant Velvet Worm	1
Tasmaphena lamproides - Keeled Snail	1
Tyto novaehollandiae castanops - Masked Owl	22

Table 3. Number of requests for advice by operation type

Forest type	Operation type	Notifications
Native Forest	Advance Growth Retention	7
	Aggregated Retention	4
	Areas to be reserved from harvesting	1
	Clearfall followed by Softwood Plantation	1
	Clearfall followed by Sowing of Native Seed	37
	Clearfall to Remain Cleared	13
	Overstorey Removal	2
	Partial Harvesting	3

	Potential Sawlog Retention	1
	Road Construction	8
	Seed Tree Retention	8
	Selective Logging	1
	Shelterwood - First cut	3
	Shelterwood - Second cut	1
Plantation hardwood	Clearfall followed by Hardwood Plantation	7
	Thinning	6
Plantation softwood	Clearfall followed by Hardwood Plantation	1
	Clearfall followed by Softwood Plantation	7
	Clearfall to Remain Cleared	2

d. Monitoring and reporting on the standard of compliance with, and the effectiveness of, the endorsed or site-specific management prescriptions contained within forest practices plans.

- The FPA compliance program assessed 30 FPPs covering the full range of forest operations in 2012–13 as part of the annual compliance audit. The results of this audit are in Appendix 3 of the FPA annual report.
- A report on compliance with strategic management recommendations for threatened fauna species on a State Forest block in the NW of Tasmania, Togari forest block was provided by Forestry Tasmania, Sustainability Branch (Forestry Tasmania, 2013). In general, the strategic recommendations for threatened fauna applicable to Togari Forest Block have been met. These include management recommendations for the keeled snail and the grey goshawk.

e. Undertaking investigations and taking any enforcement action that is necessary to achieve compliance with the prescriptions contained within forest practices plans, in conjunction with the DPIPWE where relevant.

- The Section Head, Threatened Species, DPIPWE was notified of any threatened species related compliance investigations throughout 2012–13.
- A total of 36 compliance investigations into alleged breaches of the Forest Practices Act or a forest practices plan were completed in the financial year, of which there were 23 investigations which found evidence of a breach. Of the 36 investigations that were completed there were three relating to threatened species. One related to the management of a wedge-tailed eagle nest found during harvesting operations. In this instance it was determined that protocols were followed correctly and no breach occurred. The two other investigations regarding threatened species, related to clearing without a forest practices plan. One investigation was resolved through the courts with the landowner pleading guilty, being convicted and fined \$5,500. In this case the clearing included areas containing habitat for the New Holland mouse. The other investigation involved the clearing of forest, including areas containing suitable foraging habitat for the swift parrot, without a forest practices plan. The matter was resolved by payment of a \$2,000 fine by the landowner. The landowner subsequently prepared a forest practices plan to enable the cleared area to remain cleared, but was required to include in the plan the establishment of reserves and restoration in areas with equivalent values.

f. *Collaborating with DPIPWE on, and participating in, research and monitoring priorities relating to threatened species management under the forest practices system.*

- The Biodiversity Program’s staff contributed to 16 research and monitoring projects in 2012–13: eight were related to threatened species management issues. Six of these projects involve collaboration with Threatened Species and Marine Conservation Section (now known as the Threatened Species and Marine Conservation Section of DPIPWE). These research projects are summarised in Table 1.
- There was considerable collaboration with external researchers, students and institutions and most were externally funded or funded through \$’s raised from courses.
- An FPA student research grant was awarded to Tierney O’Sullivan. Tierney is a Fullbright scholarship recipient from the USA and is studying wedge-tailed eagle behaviour. Co-supervision is also being provided for this project by DPIPWE.
- The FPA Biodiversity Manager and Research Biologist and DPIPWE, Threatened Species, Manager and Senior Zoologist, continued to provide supervisory support to a number of DPIPWE/FPA/CRC supported Utas student projects with application to the management of forest associated threatened species including: Shannon Troy (spotted tailed quolls, PhD), Jo Potter (ptunarra brown butterfly, PhD), Nick Beeton (Tasmanian devil) and Matt Webb (swift parrot, PhD). Meetings were conducted with several potential new students for 2012–13.
- One of the milestones of the FPA and DPIPWE project, (Swift parrot and RFA Priority Species Project) funded by the Australian and Tasmanian governments in February 2010 (see 1.5, RFA priority species project in the FPA annual report), is to establish a program to monitor the effectiveness of management actions for RFA priority species (i.e. threatened species that are vulnerable to forestry activities). The FPA Biodiversity Program staff, in consultation with DPIPWE staff, completed the background reports (see the publications list) for this project in 2012/13 including a report on the priorities for effectiveness monitoring.

Table 1 Threatened species related research and monitoring projects active in 2012–13 reporting period, with summary of activities undertaken during this period.

Project title	Activities during period 1/5/12 and 30/6/13
Implementation of biodiversity provisions of Tasmania’s <i>Forest Practices Code</i>	A project monitoring the implementation of swift parrot management prescriptions in FPPs was completed and a short report prepared. A project monitoring the implementation of the eagle nest management prescriptions has been initiated.
How effective are current management actions in protecting wedge-tailed eagle nest sites in production forests?	Surveys for 2012–13 were completed. A major report for this project (2007–2011) was finalised and is available on the FPA website. A map predicting the areas in which eagle nests are most likely to be found has been endorsed by the Threatened Species Scientific Advisory Committee. A student project has been initiated that will assess the behaviour of eagles while on the nest site and how this changes with human activity (e.g. approach of the nest site, projected noise).
Monitoring the effectiveness of the biodiversity provisions of the <i>Forest Practices Code</i>	A report was produced detailing the process undertaken to identify priorities for monitoring, including those for threatened species. The priority list developed will be used to guide future research activities.
Examining the impacts of harvesting on streamflow, to inform catchment management for threatened galaxiids	This research project is looking at the relationship between forestry activities and changes in stream flow, with the aim to develop a catchment management strategy for areas containing threatened galaxiids. The WAFL tool has been calibrated for the Swan-Apsley catchment, but data has yet to be examined. Alternative approaches to examining the impact of harvesting on steamflow are also being explored with FT and DIPIPWE.

Project title	Activities during period 1/5/12 and 30/6/13
Monitoring the occurrence of the burgundy snail	A study was initiated that re-examined sites previously surveyed for the burgundy snail. The majority of sites were re-sampled, but some of the areas got burnt by a wildfire in 2012/13 before sampling could be finalised. A report on the data collected to date is being prepared.
STUDENT PROJECTS SUPPORTED BY FPA and DPIPWE	
Landscape ecology of the spotted tailed quoll	Shannon Troy is about to submit her study examining the habitat preferences and den requirements of female spotted-tailed quolls. Shannon's results have contributed to the revision of the Biodiversity Values Database and the Threatened Fauna Adviser.
Swift parrots ecology	Dejan Stojanovic has been studying the ecology of swift parrots, and has been testing the FPA Mature Habitat Availability Map. One component of this project has been supported by both DPIPWE and FPA staff, with a draft a paper on currently being jointly prepared. The FPA has provided assistance with study design and site selection.
Swift Parrot ecology	Matt Webb (TSMS) (enrolled at ANU) is undertaking a PhD study on the ecology of the swift parrot including population trends and habitat use.
Tasmanian devil habitat, population and disease modelling	Nick Beeton has completed a PhD study on devil habitat, population and disease modelling.
Population trends and threats to ptunarra brown butterfly	Jo Potter (Utas) is undertaking a PhD on population trends and threats to ptunarra brown butterfly. This project is also supported by Gunns Limited, Surrey Hills.
Eagle behaviour	Tierney O'Sullivan received a Fullbright scholarship to come from the USA to Tasmania to study wedge-tailed eagle behaviour. FPA have contributed to the design of this project and will provide supervisory support and technical assistance as will DPIPWE..

Publications from research and monitoring

Todd, M. K., Kavanagh, R.P., Bell, P.J., and Munks, S.A. (in prep) Calling behaviour of the Tasmanian Masked Owl.

Todd, M. K., Kavanagh, R.P., Bell, P.J., and Munks, S.A. (in prep) Importance of rodents and bandicoots in the diet of the Tasmanian Masked Owl.

Webb, M., Witherspoon, S., Stojanovic, D., Heinsohn, R., Cunningham, R., Bell, P. and Terauds, A. (in prep) Location matters – using spatially explicit models to predict the distribution of highly mobile species.

Stojanovic, D., Koch, A. J., Webb, M., Cunningham, R., Roshier, D., Heinsohn, R. (draft). "Modelling cryptic habitat features at the landscape scale: can we predict the availability of tree cavities for wildlife?"

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Document control log table

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