



Department of
Environment and Conservation

Our environment, our future



**SUMMARY ANNUAL REPORT
THREATENED FAUNA RECOVERY TEAM**

PROGRAM INFORMATION

Recovery Team name	Marine Turtle Recovery Team
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Reporting Period (Financial / Calendar Year)	Calendar year 2009
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Current membership

Member		Representing
1. CHAIR	Tamra Chapman	DEC HQ
2. EXEC OFFICER	Amy Mutton	DEC HQ
3.	Linda Reinhold	DEC Shark Bay
4.	Raquel Carter	DEC HQ
5.	Arvid Hogstrom	DEC Pilbara
6.	Cath Samson	DEC Pilbara
7.	Marissa Speirs	DEC Pilbara
8.	Sharon Ferguson	DEC West Kimberley
9.	Troy Sinclair	DEC East Kimberley
10.	Keith Morris	DEC HQ
11.	Kim Friedman	DEC HQ
12.	Fran Stanley	DEC HQ
13.	Glenn McFarlane	Stakeholder
14.	Kelly Howlett	Stakeholder
15.	Peter Salinovich	Stakeholder
16.	Susie Bedford	Stakeholder
17.	Anna Vitenbergs	Stakeholder
18.	Kellie Pendoley	Stakeholder

Dates meetings were held	01 March 2009 and 02 Sep 2010
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<p>One to two paragraph summary of achievements suitable for WATSNU</p>	<p>Improvements were made in data collection, management and communication for impact assessment. Monitoring of key nesting sites was continued and advice provided on minimising the impacts of industrial development.</p>
<p>List of actions undertaken by Recovery Team (from the actions in your Recovery Plan)</p>	
<p>1. Develop and implement a communication plan to increase awareness and understanding of the biology, ecology and conservation needs of marine turtles throughout the community.</p>	<p>Revised the <i>Marine turtles of the Pilbara Coast</i> brochure Jan 2009.</p> <p>DEC Publications advised on 29 Jul 2009 that graphic design for web-pages can be conducted and that there would be no cost since printing was not required. NAILSMA released the Dugong and Marine Turtle: Teaching Resource and Information Package by the Torres Strait Regional Authority's Land and Sea Management Unit.</p>
<p>2. Develop and implement a plan to survey, monitor and control predators on selected nesting beaches.</p>	<p>Peter Orell (Western Shield Zoologist) requested reports on the Exmouth fox baiting program as part of a baiting program review and Tamra Chapman emailed the reports on 10 Dec 2009.</p> <p>Undergraduate student Sally Graham (Supervised by Mike van Keulen and Natalie Bool) licensed to study predation of marine turtle eggs and hatchlings by ghost crabs at Ningaloo MP, Jurabi and Bundegi Coastal Parks.</p>
<p>3. Survey and map important populations and habitats critical to the survival of marine turtles in Western Australia.</p>	<p>Kelly Howlett forwarded the data and summary reports for Pretty Pool and Cemetery Beach, Port Hedland track monitoring on disc 03 Jun 2009.</p> <p>Due to a change to electronic license (to take fauna) returns in Nov 2008, all licensees will have to upload co-ordinates for fauna observations online, into 'Fauna Survey'. These data will then be accessible (at varying levels of accuracy) via NatureMap. As resources permit, data may be entered retrospectively.</p> <p>NAILSMA released 'The I-Tracker Report – A review of the I-Tracker data collection and management program across north Australia</p> <p>A shape file of known and / or potential turtle nesting beaches for Barrow Island was forwarded to DEC Marine Planning for preparation of the Barrow, Boodie, Double and Middle Island Nature Reserves Management Plan, with cc: to Species and Communities Branch 04 Dec 2009.</p> <p>A total of 30 turtles fitted with GPS satellite transmitters by Pendoley Environmental. The turtles were released from Barrow Island (on behalf of Chevron Gorgon Gas project) and from Cemetery Beach (on behalf of BHP Billiton) can be seen online at http://www.seaturtle.org/tracking/.</p> <p>Surveys, tagging, beach track count, hatchling success, nest predation, hatchling orientation, predation and dispersal studies are ongoing at a range of locations in WA from Dirk Hartog Island to Cape Domett.</p>
<p>4. Prepare a guidance document and provide advice to minimise the impacts of industrial, residential and tourism development on marine turtles and their habitat.</p>	<p>Tamra Chapman assisted in the strategic regional assessment of specific conservation values (relating to marine turtles) and the current and emerging pressures on the North-west marine environment as part of the development of the North-west Marine Bioregional Plan by the Commonwealth Department of the Environment, Water, Heritage and the Arts (DEWHA). The Species and Communities Branch also forwarded a shape file of tagging rookeries.</p>

	<p>Tamra Chapman provided data and advice on marine species occurring in the Port Hedland area, in relation to a referral for Port Hedland dredging project under the EPBC Act.</p> <p>Kevin Crane, Warren Tracey and Kellie Pendoley attended a DEWHA Workshop (Canberra) 'Petroleum Industry Impacts on Marine Turtles' aimed at improving information on impacts on marine turtle populations. Aim – to contribute to the development of a policy statement regarding minimising and mitigating any impact.</p> <p>DEC Environmental Management, Marine Planning, Marine Science and Species and Communities Branches provided (confidential) advice to the DEC Director General regarding off-sets from the Chevron Gorgon Joint Venture gas development on Barrow Island.</p> <p>Tamra Chapman provided maps and information on dugong and turtle records in the Pilbara as part of biodiversity assessments for industrial development proposals to Jackie Purvis (Syrinx – Port Hedland) and Michelle Vardy (BHP Billiton).</p> <p>Kevin Crane circulated the first draft of EPA guideline "Protecting Sea Turtles from Light Impacts" to DEC personnel for comment.</p> <p>Marissa Speirs circulated a lighting specification guidance from www.metalight.com.au to all members.</p> <p>A workshop regarding turtles and dredging was held in Perth.</p> <p>Raquel Carter forwarded the first draft of the 'Marine Turtle Environmental Impact Assessment and Management Guidance' to Kellie Pendoley and Tamra Chapman for review on 23 Dec 2009.</p>
5. Develop and implement a plan to manage tourism and recreation activity to ensure it is sustainable.	<p>Ray DeJong (A/Manager DEC Exmouth) forwarded Memo: 'Jurabi Coastal Park Commercial Tour Operations: Turtle Interaction Fee Structure, Ningaloo Marine Park' to DEC HQ staff for review. The memo outlined proposed management, training and fee structure arrangements.</p>
6. Encourage and support programs to monitor and manage harvest of marine turtles for traditional and cultural purposes by Indigenous persons and minimise illegal take.	<p>Tamra Chapman met with and provided (confidential) advice to Dave Hampton and Bill Carr (DEC) who are drafting amendments to legislation (Section 23, <i>Wildlife Conservation Act 1950</i>) presently: 'A person of Aboriginal descent may take dugong sufficient only for food for himself and his family'</p> <p>NAILSMA released 'The socioeconomics of Indigenous customary use and management of dugong and marine turtles—a view from Bardi and Jawi sea country, Western Australia</p>
7. Develop a research plan to study the biology and ecology of marine turtle populations in Western Australia and publish the results.	<p>CVA forwarded a report to DEC on Flatback nesting activity (track monitoring) on Cable Beach, Broome (2006/07 and 2007/08) and Flatback nesting activity (track monitoring) on Eco Beach, Broome (Nov-Dec 2008).</p> <p>CVA secured a Coastwest Grant for track counts and tagging at Eco Beach and Eighty Mile Beach and was issued with a license to take fauna by DEC.</p> <p>DEC Broome received \$100k for flatback tagging research at Cape Domett from Federal Coastcare.</p> <p>In a co-operative public / private sector project, with Tamra Chapman and Bob Prince (DEC), Pendoley Environmental has donated \$10,000 and secured a further \$10,000 from Gorgon to upgrade the WA Marine Turtle Tagging Database – building (by Brett Rawcliffe) and testing is underway</p>

	<p>In a co-operative public / private sector project, Pendoley Environmental and DEC (Observatory) are developing technology to measure light output remote from the source. Will be rolled out into the field for the 2009/2010 nesting season.</p>
<p>8. Monitor and assist in the development and implementation of fishing practices to minimise the effects of fishing bycatch on marine turtles.</p>	<p>Fishing bycatch was monitored via the state of the fisheries reports.</p>
<p>9. Prepare a guidance document and provide advice to vessel operators to minimise impacts on marine turtles.</p>	<p>This action is being addressed as part of Action 4.</p>
<p>10. Design a [monitoring and] research program to predict and manage the effects of climate change on marine turtle biology, ecology and habitat.</p>	<p>A national research program to monitor change in nesting beach temperatures continued. Marissa Speirs forwarded 08/09 data sets from Keast Island North and South, Rosemary Island North and South, Jurabi Coast North and South, Ningaloo Coast North and South (2 x loggers per location) to SCB and these data were forwarded to the project co-ordinator by Peter Mawson.</p> <p>Tamra Chapman made arrangements with Dorian Moro to deploy the final two of a set of data loggers for nesting beaches on Barrow Island. Contractor Gerald Kutchling agreed to analyse and report on the results of collection of data on sand temperature loggers at Barrow Island and Munda over the last 3-4 years, and extend the data logging program.</p> <p>BSc Honours Project: "Determine the pivotal temperature for the flatback marine turtle by placing temperature loggers in and around nests, collecting eggs for sexing, incubation, euthanasia and sexing hatchlings, to model and predict the effects of climate change on sex ratios of hatchlings at Cape Lambert and Delambre Island"</p>
<p>Other</p>	<p>Tamra Chapman prepared a metadata statement on the Marine Turtle Tagging Database for the Shared Land Information Platform (whole of government project).</p> <p>Tamra Chapman reviewed the draft <i>Ecological Character Description (ECD) of the Eighty Mile Beach Ramsar Site</i> for marine turtle information. The ECD forms the benchmark for management planning and action, including site monitoring to detect negative impacts.</p> <p>Tamra Chapman provided data on nesting population trends on Dirk Hartog Island to Murdoch University PhD student Sabrina Trocini who is studying hatchling success in loggerhead turtles.</p> <p>Tamra Chapman provided information on plans to map important habitats, conduct surveys and study climate change in response to the Conservation Commission report "Status performance biodiversity assessment: biodiversity conservation of Western Australian Islands".</p> <p>Tamra Chapman provided information and data in response to public submissions relating to the Kimberley Conservation Strategy.</p> <p>Ross Mack prepared a briefing on the rehabilitation and release (on 31 Jul 2009) of a stranded adult female green turtle at Shark Bay and this was emailed to all members.</p> <p>Tamra Chapman provided a copy of the draft recovery plan to</p>

	<p>Michelle Anderson (DEC Marine Planning) for preparation of DEC's draft terrestrial <i>Barrow, Boodie, Double and Middle Island Nature Reserves Management Plan</i></p> <p>Environment Minister Donna Faragher announced that a new national park would be created on Western Australia's largest island, Dirk Hartog Island, part of the Shark Bay World Heritage Area</p>
High Priority Actions Requiring Funding	
Task	Amount needed and what for
Upgrade of tagging and research database	\$30,000 for IT
CRC for postgraduate research into effects of industry on turtles	\$250,000 for student projects
Co-ordination of tagging in WA	\$60,000 per annum for consumables, flights and team management.