Appendix 5: Codes of Conduct and Guidelines relating to Dugong & Turtle Tourism

Table 1. Summary of codes of conduct for beach-based marine turtle tourism interactions

Table 1. Summary of codes of o 1.1 Pre nesting phase	GBRMPA 15, 27	C'wealth DEH 19	QLD EPA 1, 5, 21	CALM WA 18 18	PWC (NT) 16	MEDASSET (Mediterranean) 2			Coral Reef Alliance (Int'l NGO) 9		Waayers Marine Turtle Tours (AUS) 20. 28	Trinidad & Tobago 29	Florida Fish & Wildlife (USA) 30	Heron Island (AUS) 32	Amigos de Sian Ka'an (Mexico) 33
Do not move close to or approach turtle leaving water and moving up beach	~		~	~				~	~		~	~		~	
Do not shine torch on turtle leaving water and moving up beach	~		~		~		~	~			~	\checkmark	~	~	
Specified minimum distance to pre-nesting turtle				15 mtr							5 mtr	15 mtr		15 mtr	
Position yourself behind turtle											~			\checkmark	
Photography <u>not</u> allowed			~	~	~		~		~		~		~	~	
1.2 Nest building phase															
Do not shine torch on turtle while nest building	~		~		~		~	~	~						
Only approach nesting turtle from behind								~	~		~				
Guide may approach turtle from behind to establish nesting phase for photography				~									~		
Do not touch turtle during nest building			~					~							
Photography <u>not</u> allowed			~	~	~		~		~		~		~	~	
Minimum distance to nesting turtle				1 mtr ¹										10 mtr	
1.3 Egg laying phase															
Do not shine torch directly on turtle laying eggs	~				~			~	~				~		
Avoid sudden movements while turtle is laying eggs	~		~					~	~						
Do not touch turtle eggs	~				~				~			~			
Avoid loud noise during laying								~	~				~		
Occasional gentle touching permitted during laying			~												
Minimum distance to egg laying turtle staying behind rear flippers				0.5 mtr							0.5 mtr			10 mtr	
Photography allowed during egg laying					\checkmark^2							~			
1.4 Post laying / nesting phase															
Do not impede turtle or position humans between turtle and the sea	~			~						~		~			
Do not disturb or dig up unhatched nests				~	~				~						
Photography and lighting permitted after laying			√ ³		\checkmark^4				~						
Gentle touching permitted after laying and on return to sea			~										~		
Minimum distance to nest covering activity from rear				2 mtr							5 mtr	-			

¹ Minimum distance permitted for tour operator and two tourists ² Photography only permitted from behind laying turtle when guide permits

 ³ Photography permitted directly after laying but not as turtle returns to sea
 ⁴ Close up photos of turtle's head allowed once filling of chamber has commenced

1.5 General beach conditions	GBRMPA 15, 27	C'wealth DEH 19	QLD EPA 1, 5, 21	CALM WA 18	PWC (NT) 16	MEDASSET (Mediterranean) 2	ADIO (Costa Rica) 3	Watchable Wildlife Conference	Coral Reef Alliance (NGO) 9	NMFS (USA) 14	Waayers Marine Turtle Tours (AUS) 20-28	Trinidad & Tobago 29	Florida Fish & Wildlife (USA) 30	Heron Island (AUS) 32	Amigos de Sian Ka'an (Mexico) 33
1.5.1 Use of lights and strobes															
Minimal use of torches – maximum 2 cell 3 volt hand-held	√5		~	~	~		√5	√5	~		~	✓	√5		
No flash photography on turtle nesting beach				✓ ⁶			~		√7				~	~	
Do not light campfires on turtle nesting beaches	~	~					~	~	~						
Minimise or shield artificial lighting on beach			~						~			~		~	~
Install polarized glass to all buildings adjacent to beach															~
1.5.2 Disturbance															
Keep dogs and other pets away	~	~			~			~	~						
Do not touch any turtle, nesting or otherwise	~			√3				~				~			
Avoid driving on known nesting beach						~	~		~						
No noise making, noise amplification or radios permitted												✓			
Maximum time limit of encounter per animal								30 mins	30 mins						
Limited number of tourists at sighting		30	70	15 +2 ⁸	12– 200		8+1 ⁹						50 +2 ⁹		
Move away from turtle if showing signs of distress									~						
Never harass animal to gain a better look or photograph												√			
1.5.3 Beach care															
Avoid sticking beach umbrellas in sand on nest beaches						~									
Level off sand castles and fill holes or wheel ruts on beach						~									
Do not leave litter on nesting beaches						~									
Do not leave chairs, umbrellas or other obstructions on beach									~						
Avoid constructing sea walls or hard structures on nesting beaches															~
Avoid mechanical cleaners or tractors on beach in nesting season															~
Recommend use of rakes with 5cm prongs only for beach cleaning															~
1.5.4 Information															
Mandatory turtle sightings data supplied at specified intervals	~	~											~		
Minimum tour guide on-site training – 1 day and 1 night					~										
Participants given mandatory information on current legislation covering species													~		
Mandatory interpretative programmes featuring slide presentations and lectures													~		

 ⁵ recommends red cloth or cellophane filter over light
 ⁶ Specifies between hours of sunset and sunrise
 ⁷ Use flash photography sparingly
 ⁸ Includes guides, tour leaders or volunteers

1.6 Hatchlings	GBRMPA 15, 27	C'wealth DEH 19	QLD EPA 1, 5, 21	CALM WA 18	PWC (NT) 16	MEDASSET (Mediterranean) 2	ADIO (Costa Rica) 3	Watchable Wildlife Conference 7	Coral Reef Alliance (Int'l NGO) 9	NMFS (USA) 14	Waayers Marine Turtle Tours (AUS) 20, 28	Trinidad & Tobago 29	Florida Fish & Wildlife (USA) 30	Heron Island (AUS) 32	Amigos de Sian Ka'an (Mexico) 33
Do not use torch on hatchlings as they make their way to sea			~	~		~			~			~	~	~	
Do not touch or handle the hatchlings	~		~	✓ ⁹	✓ ¹⁰			~						~	
Do not impede movement of hatchling or come between hatchling and the sea	~		~	~					~			~			
Do not photograph hatchlings owing to light sensitivity									~				~	~	
Do not illuminate hatchlings once in water to avoid confusion and possible return			~										~		
Shield hatchlings from lights on beach using own body if necessary									~						
Extinguish any unnecessary beach lighting														~	
No. of known hatched nests permitted to be opened per tour					3										
Minimum distance to hatchling				1 mtr											

⁹ Notwithstanding provisions of Regulation 28A of Wildlife Conservation Regulations 1970.
¹⁰ PWCNT education programmes permit tourist photo opportunity holding hatchlings

Table 2. Summary of codes of conduct for vessel-based marine turtle interactions

Vessel-based viewing	GBRMPA 15, 27	C'wealth DEH 19	QLD EPA 1, 5, 21	CALM WA 18	PWC (NT) 16	MEDASSET (Mediterranean) 2	ADIO (Costa Rica) 3	Watchable Wildlife Conference 7	Coral Reef Alliance (Int'l NGO) 9	NMFS (USA) 14	Waayers Marine Turtle Tours (AUS) 20, 28	Trinidad & Tobago 29	Florida Fish & Wildlife (USA) 30	Heron Island (AUS) 32	Amigos de Sian Ka'an (Mexico) 33
Be mindful of cumulative impacts of other boats								~		~					
When several vessels present, communicate to avoid disturbance to turtles								~		~					
Avoid excessive speed near turtles								~							
Avoid sudden changes in speed and/or direction during encounter								~		~					
Slow and steer away from surfacing turtles								~							
Do not encircle turtles between boats or boat and shore, allow an escape route								~		~					
Depart area with care, slowly maneuvering vessel away								~		~					
Leave the area if animal shows signs of disturbance										~					
Maximum time of encounter per animal limit										30 mins					
If turtle approaches vessel engage neutral and allow animal to pass										~					
Avoid using speedboats near known nesting beaches						~									
Do not approach animal head on										~					

Table 3. Summary of codes of conduct for in-water encounters with marine turtles

In-water encounters	GBRMPA 15, 27	C'wealth DEH 19	QLD EPA 1, 5, 21	CALM WA 18	PWC (NT) 16	MEDASSET (Mediterranean) 2	ADIO (Costa Rica) 3	Watchable Wildlife Conference 7	Coral Reef Alliance (Int'l NGO) 9	NMFS (USA) 14	Waayers Marine Turtle Tours (AUS) 20, 28	Trinidad & Tobago 29	Florida Fish & Wildlife (USA) 30	Heron Island (AUS) 32	Amigos de Sian Ka'an (Mexico) 33
Do not attempt to touch or ride turtles	~							~	~	~		~			
Do not feed or attempt to feed animals								~	~	~		~			
Do not chase, surround or approach closely – allow an escape route	~							~				~			
Avoid abrupt movement and move slowly and calmly								~	~						
Avoid any loud noises underwater								~				~			
Do not litter in the water									~			~			
Keep clear of turtles attempting to surface to breath								~							
Do not disturb feeding, resting or sleeping turtles									~						

Management of encounters with dugongs	GBRMPA 4, 13, 22	Anderson PK CALM (WA) 8	CALM (WA) 10	Red Cliff Bay (WA) 12	SUNFISH (QLD) 11
4.1 Before interaction					
Minimum approach distance to dugong at speed greater than 5 knots	100 mtr ¹¹	100 mtr	100 mtr	100 mtr	
Minimum approach distance to dugong while under power or steerage	50 mtr	20 mtr	40 mtr	40 mtr	
Tour operator shall place a dedicated crew member to act as a marine animal lookout			\checkmark	~	
Shall not approach dugongs "head on" under power			\checkmark	~	
Reduce boat speed in recognised feeding areas or upon seeing an animal	√ ¹²				\checkmark
4.2 During interaction					
Shall not herd, intercept path of travel or chase marine mammals	✓	~	✓	✓	
Shall not come between a mother and calf	~	~	\checkmark	~	
Shall not feed marine mammals or throw any object in the water near marine mammals	~		\checkmark	~	
No person shall enter the water, swim or dive during any interactions with dugongs	~		\checkmark	~	
Abandon contact if dugong becomes distressed or alarmed	~		\checkmark	~	
Shall not separate a group of marine mammals			\checkmark	~	~
Maximum interaction time (if in close proximity < 50 mtr)		30 mins	15 mins	15 mins	
Shall not restrict the normal behaviour of marine mammals			\checkmark	~	
Shall not 'box in' dugongs			\checkmark	~	
Distance at which tour operator must position vessel if dugong is being observed by research or other licenced vessel		500 mtr	200 mtr	400 mtr ¹³	
Signal flag to be flown when vessel engaged in an interaction with a dugong		~		√ ¹⁴	
Shall not touch or alarm a dugong during any interaction	~				
Avoid disturbing a feeding dugong					✓
4.3 After interaction					
On departing , distance before engaging propeller and accelerating to 5 knots	50 mtr	100mtr	300 mtr ¹⁵	300 mtr ¹⁴	
Following interaction, no further contact with that dugong is to be sought by operator	~	~	\checkmark	✓	
4.4 General conditions					
Mandatory animal sightings data supplied at specified intervals	3 mths ¹⁶				\checkmark
Tour operator shall promote appreciation of mammals separate from those already under observation from research vessels			✓		✓
No more than one vessel permitted in dugong foraging area between sunset and sunrise		~			
Maximum time a viewing vessel may anchor in a foraging area		24 hrs			
Observe no-go areas or transit lanes	✓			✓	
Assist where possible to release entangled dugong and ensure ability to breathe				~	
Operator's fixed wing aircraft not to fly lower than 300 metres or within a horizontal distance of 300 metres of dugongs			\checkmark		✓
Rotary aircraft must <u>not</u> be utilised for dugong observation			\checkmark		✓

Table 4. Summary of codes of conduct for interactions with dugongs

13 If interaction signal flag raised within 400 mtrs of another vessel, radio comms should be used between skippers to identify animals for interaction

16 See Appendix xx GBRMPA Marine Mammal Sighting sheets

¹¹ GBRMPA specify at planing speed rather than five knots

¹² Speed limits of 25 knots in open water reducing to less than 10 knots in shallow water seagrass beds

¹⁴ Signal flag not to be raised further than 400 mtrs from animal

¹⁵ CALM specify leaving the vicinity at no greater than five knots before picking up speed at 300 mtrs distance

Managing interactions with manatees	Florida Fish & Wildlife (USA) 6, 26	NMFS (USA) 14	Florida Power & Light Co (USA) 23, 24,	Destinations Belize 25	Save the Manatee Club 31
Shall not pursue or chase manatee	~	~	~	~	~
Shall not come between a mother and calf	~	\checkmark	\checkmark	~	~
Avoid excessive noise or splashing around manatees	~	\checkmark	\checkmark	~	~
Shall not feed manatees or give them water	✓		~	~	~
Do not touch, prod, poke, ride or stab a manatee with feet, hands or object	✓	~	~		~
Use snorkelling equipment rather than scuba when attempting to view manatees	~		\checkmark		~
Obey speed limits in known manatee areas avoiding excessive speed	~	\checkmark	\checkmark		
Do not isolate or single out an individual animal from a group	✓		~		~
Float on surface for best passive viewing	✓		~		
Wear polarized glasses to better identify manatees near or under the surface	✓		~		
Do not discard fishing line, hooks or other litter in known manatee area	✓		~		
Be mindful of cumulative impacts of other boats		~			
When several vessels present, communicate to avoid disturbance to manatees		~			
Avoid sudden changes in speed and/or direction during encounter		~			
Slow and steer away from surfacing manatees		~			
Do not encircle manatees between boats or boat and shore, allow an escape route		~			
Depart area with care, slowly maneuvering vessel away		~			
Leave the area if animal shows signs of disturbance		~			
Maximum time of encounter per animal limit		15 mins			
If manatee approaches vessel engage neutral and allow animal to pass		~			
Do not approach animal head on		~			
Do not water-ski in manatee area			~		
Avoid boating over seagrass beds and shallow areas			~		
Do not operate boat over concentrations of manatees			~		
Minimum distance from manatee to powerboat			15 mtr		
Do not enter manatee sanctuaries					~
Do not swim with manatees				~	
Pole, paddle or use a trolling motor across seagrass beds	✓				

Table 5. Summary of codes of conduct for interactions with manatees

Table 6: List of codes of conduct, guidelines and permit conditions for managingdugong & turtle tourism.

(D = dugong related guidelines, M = manatee related guidelines, T = turtle related guidelines)

Code No	D/M/T	Code
1	Т	Queensland Parks and Wildlife Service (2001). <i>Turtle watching guide: Mon Repos Conservation Park</i> [Brochure] 2pp. Environmental Protection Agency: Brisbane.
2	Т	MEDASSET (2000). <i>Mediterranean Sea Turtle in her natural environment</i> [Brochure] 2 pp. Mediterranean Association to Save the Sea Turtles: Athens.
3	Т	ADIO. National Wildlife Refuge Ostionol: Regulations to visitors [Brochure] 2 pp. Association for the Integrated Development of Ostional: Guanacaste, Costa Rica.
4	D	Great Barrier Reef Marine Park Authority (2001) <i>Dugong Watching Conditions</i> (Marine Parks Permit). Great Barrier Reef Marine Park Authority: Townsville.
5	Т	Queensland Parks and Wildlife Service (1999). Capricornia Cays National Park and Capricornia Cays National Park (Scientific) Management Plan. 26pp. Queensland Parks and Wildlife Service: Brisbane.
6	М	Florida Fish and Wildlife Conservation Commission (U.S). <i>Manatee viewing guidelines</i> . Retrieved 25 th April, 2004 from the world wide web <u>http://www.floridaconservation.org/psm/manatee/guide.htm</u>
7	Т	Seminoff, J.A., (2002). <i>Best-Practice Guidelines for Watching Sea Turtles in the Wild</i> . Marine Wildlife Viewing Workshop, Watchable Wildlife Conference, 14 October 2002, St Paul Minnesota.
8	D	Anderson, P.K. (1997). Suggested interaction rules for dugong viewing vessels. In Commercial Dugong Tourism at Shark Bay. A Report to the Western Australian Department of Conservation and Land Management. Department of Conservation and Land Management: Perth.
9	Т	Coral Reef Alliance (2002). Turtle Watching: Guidelines. [Brochure] 2pp. The Coral Reef Alliance.
10	D	Western Australia Department of Conservation and Land Management (1998) <i>Marine Mammal</i> <i>Interaction conditions for dugongs</i> 2 pp. Western Australia Department of Conservation and Land Management: Perth.
11	D	Sunfish Code of Conduct to reduce impact on Dugong.
12	D	Red Cliff Bay Code of Conduct: Vessels and Marine Mammals in the Red Cliff Bay Region, Shark Bay
13	D	Great Barrier Reef Marine Park Authority (2001). Best Environmental Practices: Dugong Protection. Great Barrier Reef Marine Park Authority: Townsville.
14	M/T	National Marine Fisheries Service (U.S) <i>Southeast region marine mammal and sea turtle viewing guidelines</i> . Retrieved 26 th April, 2004 from the world wide web <u>http://www.nmfs.noaa.gov/prot_res/MMWatch/southeast_guidelines.htm</u>

15	Т	Great Barrier Reef Marine Park Authority (2001). <i>Best Environmental Practices – Turtle Watching</i> . Retrieved 26 th April, 2004 from the world wide web <u>http://www.gbrmpa.gov.au/corp_site/key_issues/tourism/turtle_watching.html</u>
16	Т	Northern Territory Parks and Wildlife Commission (2001). <i>Possible permit conditions forapplication to conduct marine turtle tours on Bare Sand Island.</i> 2 pp. Northern Territory Parks and Wildlife Commission: Darwin.
17	D	Western Australia Department of Conservation and Land Management (1998). <i>Wildlife Conservation (Close Season for Marine Mammals) Notice 1998.</i> Western Australia Department of Conservation and Land Management: Perth.
18	Т	Western Australia Department of Conservation and Land Management (CALM). Further conditions for turtle interaction tour licences issued pursuant to Wildlife Conservation Regulation 15 and the Wildlife Conservation Act applying to commercial wildlife interaction tour operations. 2 pp. Western Australia Department of Conservation and Land Management: Perth.
19	Т	Commonwealth of Australia – Department of the Environment and Heritage (DEH). <i>Permit Conditions:</i> <i>Conduct of Commercial Tours in the Coringa-Herald and Lihou Reef National Nature Reserves.</i> 4pp. Commonwealth of Australia – Department of the Environment and Heritage: Canberra.
20	Т	Ningaloo Code of conduct. Watching nesting and hatching marine turtles. In Waayers, D. (2003). Developing a wildlife tourism optimisation management model based on marine turtle tourism in the Ningaloo region. [Draft copy].
21	Т	Queensland Parks and Wildlife Service. <i>Watching wildlife: Turtles</i> . Retrieved 9 th March, 2004 from the world wide web <u>http://www.epa.qld.gov.au/nature_conservation/wildlife/watching_wildlife/turtles/</u>
22	D	Great Barrier Reef Marine Park Authority. <i>Best Environmental Practices – Dugong Watching</i> . Retrieved 26 March, 2004 from the world wide web <u>http://www.gbrmpa.gov.au/corp_site/key_issues/tourism/dugong_watching.html</u>
23	М	Florida Power and Light Company (FPL). <i>Basic Guidelines Regarding Manatees</i> . Retrieved 4 April, 2004 from the world wide web <u>http://www.fpl.com/environment/endangered/contents/basic_guidelines_regarding_manatees.shtml</u>
24	М	Florida Power and Light Company (FPL). <i>Boating and Jet Skiing Guidelines</i> . Retrieved 4 April, 2004 from the world wide web http://www.fpl.com/environment/endangered/contents/boating_and_jetskiing_near_manatees.shtml
25	М	Destinations Belize (2004). <i>Wildlife of Placencia: Antillean Manatees</i> . Retrieved 2 April 2004 from the world wide web <u>http://www.destinationsbelize.com/fauna.htm</u>
26	М	Florida Fish and Wildlife Conservation Commission (2002). <i>The Florida Manatee: miss her now or miss her forever</i> . Brochure (2pp) Retrieved 2 April 29, 2004 from world wide web <u>http://www.floridaconservation.org/psm/manatee/brochures/mhncol02.pdf</u>
27	Т	Great Barrier Reef Marine Park Authority. <i>Best Environmental Practices – Diving and Snorkelling</i> , Retrieved 26 March, 2004 from the world wide web <u>http://www.gbrmpa.gov.au/corp_site/key_issues/tourism/diving.html</u>

28	Т	Waayers, D. (2002). <i>Lecture 11: Wildlife Tourism: Marine Turtle Tourism</i> . Retrieved 9 March, 2004 from the world wide web http://wwwscience.Murdoch.edu.au/teach/n279/n279contents/casestudies/turtles/turtles.html
29	Т	Marine Ecotourism in the Atlantic. <i>Trinidad and Tobago Guide for Turtle Watching</i> . Retrieved 30 April, 2004 from the world wide web <u>http://www.tourism-research.org/pgdecoist.doc</u>
30	Т	Florida Fish and Wildlife Conservation Commission. <i>Sea turtle conservation guidelines</i> . Retrieved 6 May, 2004 from the world wide web http://www.floridaconservation.org/psm/turtles/Guidelines/Guidelines.PDF
31	М	Save the Manatee Club. If you love me please don't disturb me: Manatee protection tips for divers, swimmers and boaters. Retrieved 6 May, 2004 from the world wide web <u>http://www.savethemanatee.org/Tips.htm</u>
32	Т	P&O Australian Resorts. Turtle watching guidelines. [Brochure] 2pp.
33	Т	Molina, C et al (2001). Siting infrastructure respective to beaches and dunes: reduce the impacts to nesting marine turtles. <i>In: Guidelines for low-impact tourism along the coast of Quintana Roo, Mexico.</i> Coastal Resource Center, University of Rhode Island. 42 pp