

# **Bellagio Sea Turtle Conservation Initiative: Strategic Planning for Long Term Financing of Pacific Leatherback Conservation and Recovery**

**17 - 20 July 2007**

**Awana Kijal Resort, Terengganu, Malaysia**

## **COMEBACK LEATHERBACK**

*Kijal, Terengganu (Malaysia) 20 July 2007:*

‘Saving the last viable populations of Pacific leatherback turtles is an enormous challenge, but, if action now in train can be accelerated as we envisage, Southeast Asians and Pacific Islanders will long continue to live alongside these gentle giants’, said Peter Dutton, senior scientist of the US National Marine Fisheries Service, and a world renown turtle expert.’

Dr Dutton was speaking as experts at the Bellagio Sea Turtle Conservation Initiative concluded their workshop on how to save the imperilled Pacific leatherback from extinction. The World Conservation Union (IUCN) has already red-listed the Pacific leatherbacks as critically endangered – which means they face an extremely high risk of extinction in the wild. Some 95 percent of these giant, charismatic animals have vanished in the last 20 years due to human activities such as egg poaching, loss of nesting beaches, hunting of adults and accidental captures in fisheries.

This week’s workshop in Terengganu was the second in a series which was initially convened in Bellagio, Italy in November 2003, and which created *The Bellagio Blueprint*<sup>1</sup> containing steps to conserve all sea turtle species from extinction. *The Blueprint* was the work of participants from different countries and backgrounds. Its central themes are:

- (1) the protection of all nesting beaches
- (2) reducing turtle take in at-sea and coastal fisheries
- (3) stimulating Pan-Pacific policy actions; and
- (4) encouraging the sustainability of traditional use of sea turtles

This second workshop brought together 45 experts on sea turtles, fisheries, conservation and finance from 10 countries to apply the Bellagio Blueprint for saving Pacific sea turtles to the western Pacific nesting leatherbacks as one component of a broader pan-Pacific plan. It examined information from recent studies on western Pacific leatherbacks, especially the work that has provided greater definition of nesting beaches, including a new beach identified in Papua Indonesia.

‘Saving the Pacific leatherback is an enormous challenge’, said Kitty Simonds, Executive Director of the US Western Pacific Regional Fisheries Management Council which supported the workshop, ‘but, fortunately, we basically know what needs to be done, a quite rare advantage in wildlife conservation’.

### **Business Plan to Save Leatherbacks**

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<sup>1</sup> [http://www.wpcouncil.org/protected/Documents/Blueprint\\_2003.pdf](http://www.wpcouncil.org/protected/Documents/Blueprint_2003.pdf)

The Bellagio Initiative in Terengganu agreed that a business plan was urgently needed to stop Pacific leatherbacks from sliding further towards extinction, and they drafted a plan. The full business plan will be completed by December 2007. The draft business plan makes the strong case that additional funds and other resources are needed to accelerate existing leatherback conservation actions and sustain them over the long term.

Focusing on the western Pacific, the workshop noted that active programs have been initiated by national governments, such as the turtle breeding and conservation efforts by Malaysia, and by intergovernmental agencies such as the Convention on Migratory Species and the Secretariat for the Pacific Environment Program. Several programs in Indonesia, Papua New Guinea and Solomon Islands are jointly supported by governments and international and local non-government agencies, such as Conservation International, World Wildlife Fund and The Nature Conservancy. These three countries recently signed a Memorandum of Understanding on leatherback conservation. Other programs are developed through fisheries management and research agencies, such as the Western Pacific Regional Fisheries Management Council.

The draft business plan foreshadows that, as a matter of urgency, funds need to be directed towards maintaining and building local capacity in the key western Pacific leatherback nesting countries, namely Indonesia, Malaysia, Papua New Guinea, Solomon Islands, Vanuatu and Vietnam, especially by making long term investments in the communities and fishers living and working around nesting beaches.

‘At this meeting, we have focused on actions to save the western Pacific nesting leatherbacks. However, we are acutely aware that a similar level of effort is needed to accelerate eastern Pacific planning and action and we encourage experts there to do this’, said Meryl Williams, who chaired both the Bellagio and Terengganu workshops,

For the western Pacific nesting leatherbacks, the Terengganu workshop developed detailed plans for critical conservation actions for nesting beaches, coastal fisheries and regional cooperation.

### **Critical Conservation Actions**

Saving Pacific leatherback turtles requires better understanding the complex factors that create the current extinction risks. Leatherbacks are probably the most highly migratory of marine creatures, putting to shame even the sojourns of tunas and billfish. A nesting turtle may deposit its eggs in equatorial Papuan Indonesia, swim all the way to the temperate waters of Monterey Bay to forage, return to Papua to nest a year or so later and then either make a return migration to Monterey or go off wandering elsewhere to the South China Sea off Malaysia. In doing so, a leatherback passes through the convention area of two Pacific tuna fishery management conventions (IATTC, WCPFC<sup>2</sup>) and several other smaller sub-regional associations concerned with fisheries science and management (SEAFDEC, FFA, SPC-OFP<sup>3</sup>). It also passes through the geographical competences of three regional conservation

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<sup>2</sup> Inter American Tropical Tuna Commission, Western and Central Pacific Fisheries Commission

<sup>3</sup> Southeast Asian Fisheries Development Council, Forum Fisheries Agency, Secretariat of the Pacific Community – Offshore Fisheries Program

instruments or organizations (IOSEA, IAC and SPREP<sup>4</sup>). Further, because of their terrestrial nesting habitat and aquatic life-history, turtles are often the dual responsibility of several national government departments dealing with fisheries, environment and conservation, forestry, and national parks.

#### A mosaic of responsible agencies

In the Pacific, this complex geo-political mosaic of national, sub-regional and regional entities can militate against effective turtle conservation through uncertainty about which organizations should lead the turtle conservation programs.

Since the first Bellagio meeting on Pacific sea turtles in 2003, many countries have started testing mitigation measures expected to reduce leatherback interactions and mortality in high seas pelagic longline fisheries, and some have adopted the use of better gear and handling procedures to release turtles with minimum harm. Over the same period, longline and other fishery observer programs have improved, as has reporting of accidental turtle catches. Despite these advances, gaps still remain in our knowledge and, more importantly, in the global implementation of these methods. In addition, across most of the Pacific, from Southeast and East Asia, the Pacific Islands and most of the Americas, conservation in general continues, to be a 'poor relation' to economically and socially important fisheries development.

As a consequence, initiatives like the Bellagio and Terengganu workshops are required to provide a forum and mechanism to develop a comprehensive conservation program, that seeks not only to identify threats, but also develop strategies for what needs to be done to counter these, and plans for sourcing funds to support long term effective conservation.

#### Protecting nests and beaches

Two key areas that were discussed in Terengganu were the promotion of increased recruitment of hatchlings from nesting sites, and the minimization of interactions with coastal fisheries in waters adjacent to nesting grounds and in the migratory pathways to inter-nesting areas and foraging grounds. The Western Pacific harbors some of the last remaining leatherback nesting aggregations of significant size. Although there are still hundreds of turtles nesting, 75% of these occur in one area on the north coast of Papua (Indonesia) and researchers are concerned by new information indicating that the majority of nests laid are not producing hatchlings. Some community based beach and nest protection procedures have been developed to improve hatch success, creating hope that applying these techniques now will ensure the populations are sustained in the future.

Recent studies show that the western Pacific leatherbacks consist of a meta-population comprised of scattered small aggregations nesting on the islands and areas throughout the region, with a dense focal point on the northwest coast of Papua (Indonesia). Leatherback populations all over the Pacific have collapsed, and while there are still relatively large numbers of leatherbacks nesting on the Birdshead Peninsula of Papua, there is great concern that without immediate action to ensure effective nesting beach conservation, this remaining population will also disappear.

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<sup>4</sup> Indian Ocean and South East Asia (Marine Turtle Memorandum of Understanding) supported by the United Nations Convention on Migratory Species, Inter-American Convention For The Protection And Conservation Of Sea Turtles, South Pacific Regional Environment Programme

There are opportunities to immediately enact conservation measures through community-based initiatives on the nesting beaches to dramatically increase hatchling production before these populations collapse.

The priority on protecting nesting beaches, especially for leatherbacks, was highlighted in the *Bellagio Blueprint*, as well as in other regional fora such as the Indian Ocean and Southeast Asia Memorandum of Understanding (IOSEA), and the Bismarck Solomon Seas Ecoregion, and the Tri-National Memorandum of Understanding between Indonesia, PNG, and Solomon Islands to coordinate conservation of leatherbacks.

‘Our nesting beaches working group reviewed in detail each of the leatherback nesting sites in the Western Pacific, country by country, and we identified where the nesting beaches were located, the current status of their leatherback nesting, and the bycatch of leatherbacks in gillnets and other fishing gear,’ said Manjula Tiwari of the NOAA South West Fisheries Science Center, chair of the working group. ‘We also looked at the physical characteristics of the nesting beaches, the human populations adjacent to the beaches and their economic and social circumstances, the local authorities and other organizations responsible for conservation and other issues associated with each site’.

Protecting nesting habitats and nests is a simple and necessary condition as well as the most cost-effective way to ensure the long-term survivability of leatherbacks. Many examples in the Atlantic Ocean (including South Africa, Brazil, Ascension Island and Costa Rica) show that sea turtles do recover through simple beach protection. However, despite some conservation steps, populations in Terengganu, Malaysia have collapsed with just two nesters sighted during the April-September nesting season in 2006, and none so far this year. Terengganu was once the site of one of the largest leatherback nesting populations in the world. A similar scenario is also evident at key leatherback nesting beaches in the Eastern Pacific. Accordingly, more effective hatchery methods and better enforcement of fishing regulations are needed. In addition, actions are required to minimize other threats such as the accidental capture of nesting leatherbacks in coastal fisheries adjacent to nesting beaches.

#### Stopping captures by coastal fisheries

More information is required about the interactions of leatherbacks with coastal fisheries, particularly in the vicinity of nesting beaches, where the high density of turtles increases the likelihood of interactions. Models of sea turtle population dynamics clearly show the critical role that the protection of the adult reproductive segment of the population has for the conservation of the species. Breeding adults come into contact with coastal fisheries as they migrate to and from the nesting beaches, during nesting, and in the inter-nesting habitat. Following the *Bellagio Blueprint*, the Terengganu workshop chose initially to focus on coastal fisheries impacts in Southeast Asia and Melanesia. However, participants were at pains to emphasize that should not be interpreted as a prioritization of research, conservation and management efforts solely on Western Pacific populations, as opposed to those in the Eastern Pacific Ocean. Indeed the group recognized the crucial need for a complementary effort for the Eastern Pacific Ocean to heighten existing leatherback protection.

Workshop participants noted the major differences between the density and range of fishing in the coastal zone between Southeast Asia and the Melanesian Islands (New Guinea-Papua & Papua New Guinea, Solomon Islands, Vanuatu). The coastal waters of Southeast Asia are heavily fished by a variety of gill nets, trawls, fish traps, and a range of different hook and line gears, involving hundreds of thousands of fishers. Within this densely populated and heavily exploited coastal margin, leatherbacks must migrate, forage and nest. By contrast, the coasts of Melanesia are much less densely populated and fishing markedly less intense, with a much narrower range of fishing gears, primarily handlines, small gill and seine nets and spears. Indeed, the Southeast Asian situation may be more comparable to that in Central and South America, where similar densities of fishers ply a variety of gears, including longlines and gillnets, which accidentally catch turtles. However, despite the less intensive fishing in Melanesia, the meeting agreed that fishing activities in areas adjacent to nesting sites in at least six countries in the Western Pacific –Indonesia, Papua New Guinea, Solomon Islands, Vanuatu, Vietnam and Malaysia should be properly described and fishery threats identified.

‘We discussed in particular how any fishery-related threats could be alleviated without negatively impacting the lives and incomes of fishers’, said Bundit Chokesanguan of SEAFDEC, who chaired the coastal fisheries working group. Options included modifying fishing hooks and nets, training fishers in safely releasing trapped turtles, seasonal fishery closures, area closures, fishery buy-outs and alternative employment and incomes. Recent Eastern Pacific experience showed positive outcomes from cooperation between fishers and conservationists.

### **Fund Raising Strategy**

As part of the business plan, and based on the critical conservation needs in the western Pacific and their estimated costs, the Terengganu workshop also began to develop a Pacific leatherback fund raising strategy called ‘Come Back Leatherback’. Preliminary estimates indicate that the costs of saving the leatherback are modest relative to the long term value of this charismatic and iconic species. The estimates will be refined for the final business plan.

The strategy envisages setting up a dedicated Pacific leatherback conservation fund, which will likely include a partial endowment. The long-term success of the conservation actions outlined in the workshop requires steady financial support over time to provide continuity to conservation activities. A conservation fund ensures that, with legal protections, financial assets are set aside for specific purposes, and made available according to pre-determined criteria. The fund will be designed to attract support from governments, foundations, corporations and the public. Grants will be made for focused priority conservation actions as described above, on expert advice, and the fund’s performance will be objectively evaluated.

‘The plight of the Pacific leatherback turtle has drawn teams of dedicated people to its cause’, said Heidi Gjertsen of the National Marine Fisheries Service Southwest Fisheries Science Center, and coordinator of the Terengganu workshop. ‘An important outcome is that the participants, and the organizations and interests they represent, are committed to work together on the conservation actions and fund raising. A conservation fund will make it easier for stakeholders to engage in long-

term planning and avoid the risk that critical conservation investments made in some years will be lost in others when funding is low.'