



# Factsheet

## Turtle-Tagging

### Why does SPREP tag turtles?

There are many reasons why we tag turtles. By tagging turtles with small numbered titanium or inconel flipper tags, we can study their migration patterns, distribution and growth rates. We also learn where turtles nest and where they forage.

The information collected from tagging can be used to plan how to best monitor and manage the conservation of sea turtles in the Pacific region.

There are two primary types of tagging operations undertaken by SPREP: flipper tagging and satellite tagging.

### Flipper tagging

Flipper tagging is by far the most common type of tagging carried out in the region. With this method, SPREP provides titanium and inconel flipper tags to member countries and territories for their national turtle tagging programmes.

Each flipper tag has a one-letter (for titanium tags) or two-letter (for inconel tags) prefix and a series of up to five



*Applying a flipper tag to a satellite-tagged green turtle *Chelonia mydas* in French Polynesia. Photo: Amanda Mirran.*

numbers on one side and the return address on the other side so that recovered tags can be reported back to SPREP. When attached to a turtle, this tag number identifies that individual turtle and provides us important information about the turtle, like when it was tagged, the country in which it was released, its size and even which organisation or individual conducted the tagging.

### Satellite tagging

Satellite tagging is the other type of tagging undertaken, but is less common than flipper tagging mainly due to the high costs involved.

Satellite tags are radio transmitters that are attached to the carapace (shell) of the turtle. The current programme targets nesting female turtles, as they often migrate to foraging areas far away from the nesting site. A turtle with a satellite tag attached will transmit a signal to satellites orbiting earth within a certain time interval. Information generated from satellite tags include location, dive time and other parameters. Information from the satellite is relayed to scientists carrying out the research who then plot this information to produce maps showing the migration route of each satellite tagged turtle.

In all cases, turtles receiving satellite tags also have flipper tags applied as flipper tags will remain longer on a turtle than will the transmitter.

Given the high costs, satellite tagging is only carried out when funding is available and where warranted. The cur-

### What should I do if I find a flipper-tagged turtle?

The most important thing to remember if you find or catch a tagged turtle is **do not remove the tags from its flippers!** Aside from causing the turtle pain, losing these tags means that the next time this turtle is sighted, we won't know its history and will therefore lose a lot of valuable information.



If you do find or catch a tagged turtle, make sure you write down the following information: 1) the tag number; 2) the date; 3) the location caught; 4) how it was caught; and 5) what happened to the turtle.

Once you have these details please inform SPREP and notify your local fisheries or environment office.

rent turtle satellite programme is a collaborative undertaking by SPREP, the Marine Turtle Research Program (NOAA, National Marine Fisheries Service, Pacific Islands Fisheries Science Centre, Hawaii), and member countries.

### What do we learn from tagging?

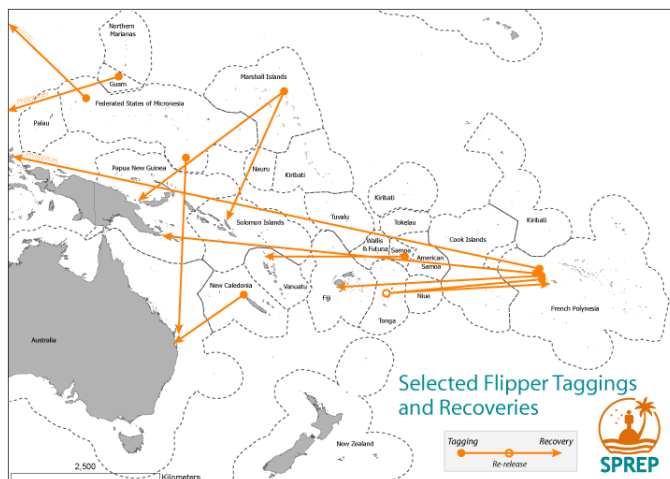
The SPREP regional turtle tagging programme started in 1991 using titanium flipper tags. In 2007 inconel tags were also introduced. Both remain in use today. When a tagged turtle is recaptured, the tag number will make it possible to trace back information concerning a particular turtle to where and when it was first tagged. Thus, researchers will be able to know its migration and growth patterns and its foraging and nesting areas (if caught nesting or foraging).

Satellite tagging provides immediate and detailed information on movement of the tagged turtle, showing the actual route taken to foraging areas by adult sea turtles after nesting. Flipper tags only provide information if the turtle is captured. They are also unable to provide information on routes taken by a turtle or its behaviour.

### The Story of Two Tagged Turtles

In late November 2006, Popora, an adult green turtle, was satellite tagged and released off the coast of Bora Bora, French Polynesia. Popora had a Curved Carapace (Shell) Length (CCL) of 93 cm and was caught off Tupai Island. In all, he travelled 5,428 kilometres through the Exclusive Economic Zones of seven countries and territories, including two separate passes through the EEZ of Vanuatu.

Also in 2006, Lady Vini, a nesting hawksbill turtle was tagged and released from Satitua Aleipata in Samoa. In the seven months (228 days) when the satellite tag was

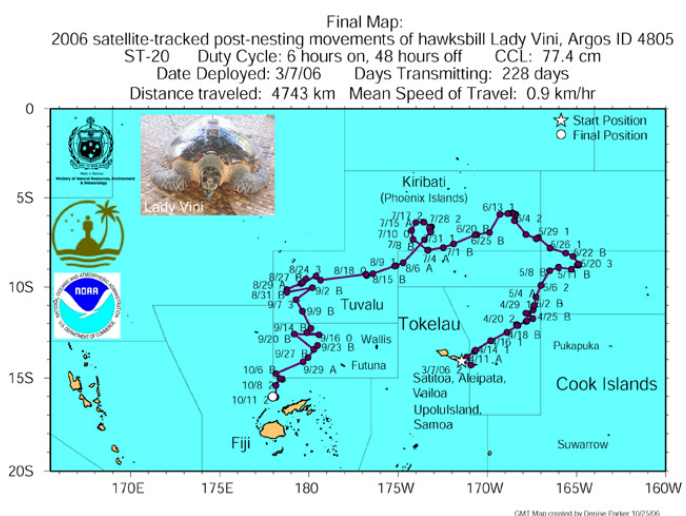


transmitting signals, Lady Vini travelled a total of 4,743 km through the EEZs of 7 countries/territories. Much to the delight of scientists, Vini proved to be a “living pelagic” turtle rather than an individual which travelled directly from nesting area to benthic foraging area (as normally occurs for post-nesting hawksbill and green turtles).

### Turtle Research & Monitoring Database System (TREDS)

Information provided by the the Turtle Research and Monitoring Database System (TREDS) allows Pacific island countries and territories to better manage their turtle resources and enables researchers to learn more about turtle nesting and foraging sites. TREDS can be used to collate data from strandings, tagging, nesting, emergence and beach surveys, as well as other biological data on turtles.

TREDS was developed through a collaborative effort by the Secretariat of the Pacific Regional Environment Programme, Western Pacific Regional Fishery Management Council, Secretariat of the Pacific Community, NOAA Fisheries, Queensland Government Environmental Protection Agency, South-East Asia Fisheries Development Centre and the Marine Research Foundation.



### Tracking tagged turtles on the Internet

The movements of Popora, Lady Vini and others as they are tracked by satellite signal and charted on a series of maps are posted at <http://www.sprep.org/YOST/>.

The entire SPREP tag series can also be viewed from links available from the SPREP web site.



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