

The monthly update on the Genetag Research Project

The Genetag Rag



Edition No. 4

May 2005

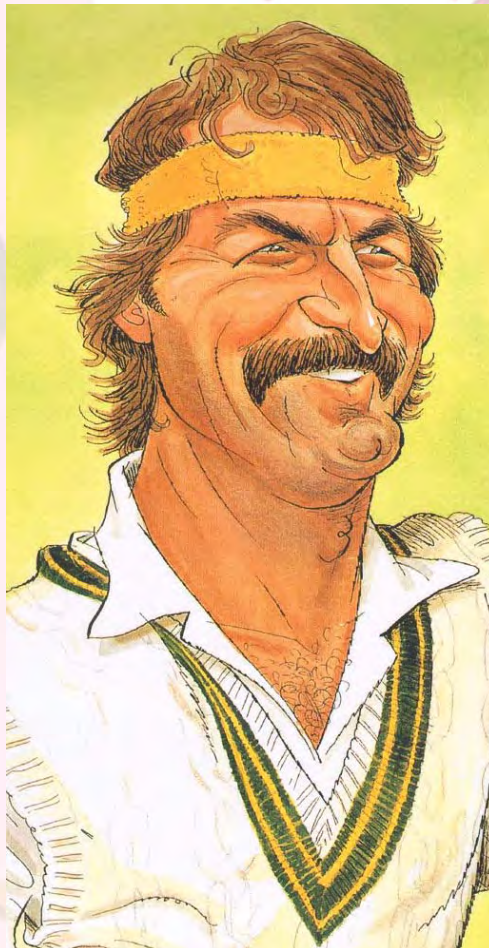


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Tagging Tournament to be bowled over by cricket legend.

Australian cricket legend, Dennis Lillee, is set to get amongst the action during the 2nd Spanish Mackerel Tagging Tournament. The Tagging Tournament will be held on the 4-5th and the 18-19th of June, with Dennis joining us on the water for the first of the two weekends.



The Genetag Research Project decided to host the tagging tournament again in 2005 after the huge success of last year's event. Close to 150 Spanish mackerel were tagged and released during the inaugural event.

The aim of the tournament is increase the number of Spanish mackerel tagged in the Top End waters. Entry to the tournament is limited to 30 vessels to ensure that adequate training and support is provided to our volunteer taggers. Highlighting the interest in this program, each of these positions has already been filled.

Reflecting the success of the inaugural event, each of last year's sponsors of the tournament jumped at the opportunity to be involved again. The tournament's sponsors include:

- Aussie Outback Supplies
- Equinox Fishing Charters
- Halco Lures
- Hanuman Restaurant
- Happy Mick's Fishing and Camping Store
- In and Outboard Marine
- Marina View Service Apartments
- Novotel Atrium
- Reidy's Lures
- Seafood on Cullen
- Shimano Reels
- Tasco
- The Jetty Restaurant

Plus, Dennis Lillee has kindly donated a caricature (see picture on left) signed by himself and Jeff Thomson. The makings of a great tournament are there, now lets hope the fishing is as good as it was last year.

2nd Spanish Mackerel Tagging Tournament

Information night
for registered taggers

5:30 pm, 1 June 2005
Berrimah Farm Social Club

For further information call:
Michael Phelan on 8999 2144

The people behind the project

This edition's spotlight focuses on Damien Broderick. Damien is a senior member of the Molecular Fisheries Laboratory and has extensive experience with molecular tools in wildlife applications.

Damien was trained at the University of Queensland. Here he used genetic markers to distinguish among breeding aggregations and to assess stock composition in harvested and feeding populations of marine turtles around the world.



Rather than finish his PhD, Damien went to Morocco to head up a conservation genetics laboratory investigating the population genetic structure of several endangered birds in North Africa and Europe. He returned to Australia in 2002 to join Jenny Ovenden's group (see last edition).

His first task for the Genetag project was to develop the genetic markers that allow us to identify individual Spanish mackerel. He is currently busy extracting DNA from Spanish mackerel samples and determining their genotypes (see next article).

Since joining the Molecular Fisheries Laboratory he has assisted in other genetic projects on prawns, sharks and rays and has recently explored alternative genetic marker systems in Spanish mackerel and prawns. Damien still plans to submit his PhD on turtle genetics sometime soon.

Genetag research project snippet: The process of genotyping Spanish mackerel.

In the previous edition, you learnt how DNA was extracted from mackerel fins. The next step is to 'genotype' the DNA collected from each fish. A genotype is a numerical description of individual fish in genetic language.

Each fish has a different genotype. For example, one fish may have a genotype of 124 126 252 254, another may have a genotype of 124 128 250 254. The genotype remains the same for the fish from birth to death.

Each set of number is established using a combination of lab methods such as polymerase chain reaction (PCR) and capillary DNA electrophoresis, followed by computer analysis. In the next edition, we will explain how genotypes are used to search for recaptures.

The next edition

In the next edition of the Genetag Rag, we will continue our stories from the lab, with Dr Jenny Ovenden explaining how genetic recaptures are identified.

Also, the next 'people behind the project' will focus on the third member of the Molecular Fisheries Laboratory, Raween Street. Plus, find out are results from the 2nd Spanish Mackerel Tagging Tournament.

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