

New South Wales  
Department of Primary Industries

MF06/2695  
(stamped 1Sep 2006)

Mr Phillip Ingram  
President  
Anglers Action Group  
PO Box 630  
NARRABEEN NSW 2101

Dear Mr Ingram

I refer to your your letter of 13 July 2006 received by the Hon Ian Macdonald MLC, NSW Minister for Primary Industries, concerning shark finning and the Convention on International Trade in Endangered Species (CITES), the IUCN Red List, population genetics and the grey nurse shark. The Minister has asked me to respond on his behalf.

The finning of any live shark including the grey nurse shark is considered to be inhumane, wasteful and results in the animal's death shortly after release. To address these issues, the practice of finning at sea in NSW waters was banned by the NSW Government and commercial fishers are required to land their shark catch prior to finning. Furthermore, while finning is an obvious threatening process to grey nurse sharks, reviews of the trade in shark fins (e.g. Rose 1996, WildAid 2001) and ongoing monitoring of landed shark fins from NSW waters have indicated that there is little, if any, illegal trade in grey nurse shark fins. Consequently, the grey nurse shark is not currently listed under CITES. Should you wish to pursue this matter further, I recommend that you contact the Department of Environment and Heritage (DEH) as they have responsibility for CITES in Australia. Further information concerning CITES in Australia may be found on the DEH web site at <http://www.deh.gov.au/biodiversity/trade-use/index.html>

Grey nurse sharks were listed as globally Vulnerable on the IUCN Red List basis in 2000. Members of the IUCN Shark Specialist Group met recently at a workshop (see Cavanagh et al 2003) to review the IUCN Red List for all Australian sharks and rays. As a result, grey nurse sharks in NSW waters are now listed as Critically Endangered on the IUCN Red List.

The population genetics of grey nurse sharks has been the subject of a collaborative study among scientists from the NSW Department of Primary Industries (NSW DPI), Macquarie University and the University of KwaZulu-Natal. This recently published study (Stow et al 2006) used samples obtained from South Africa and the east and west coasts of Australia. The study has provided the first account of genetic structuring in grey nurse sharks. Analysis of mitochondrial DNA indicated substantial genetic partitioning and low levels of migration among these regions. The results also showed that the

Australian population is especially isolated, and that within Australia there is negligible, if any, migration between east and west coasts. Moreover, the grey nurse shark population off the east Australian coast had the lowest genetic variability and the single mitochondrial haplotype suggested a small number of founding individuals. It is likely that historical processes account for the low genetic variation in the east Australian population. Importantly, the extremely limited gene-flow into the east Australian population, coupled with very low levels of genetic variation, add further concern over its future survival.

When combined with the results of the ecological research, the grey nurse shark finds itself in an extremely precarious position in NSW. It is for these reasons that I announced that scientists within NSW DPI's Science and Research Division have been tasked with developing a breeding program for the grey nurse shark to overcome its inter-uterine cannibalism. I appreciate your interest in the grey nurse shark and should you require further information about the breeding program, please contact Dr Bob Creese, the Research Leader for the Aquatic Ecosystems Research unit, on 4982 1232.

Yours sincerely

B D BUFFIER  
DIRECTOR GENERAL