



26 August 2011

NSW Department of Primary Industries,  
Locked Bag 1  
Nelson Bay  
NSW 2315

### **Re: Grey Nurse Submission**

The following comments and recommendations are made in response to the Department's discussion paper on GNS protection.

#### **Introductory Comment**

While ANSA and its members and most recreational fishers have been advocates and supporters of measures to protect GNS populations and have cooperated with state and commonwealth recovery programmes, the feedback from many of our members was that this level of cooperation and support had been disregarded and that the tone of the discussion paper embodied a bias against recreational fishing and gave an impression that the cause of the current GNS plight was ostensibly due to recreational fishing practices past and present.

There is no doubt that GNS are a resilient species given that they were relentlessly slaughtered to the point of virtual extinction by the turn of the current century to provide lamp oil for Sydney's citizens. Over the 1960/70s they were again slaughtered by ill informed spearfishers who believed they were doing the community a safety service by culling supposed man eaters with power headed spears. Considering these tragic events and the serious impact of degradation upon GNS habitat and the species food chain as a consequence of urban and industrial development it is amazing that the species still exist on the east coast. None the less east coast GNS populations have once again recovered and there is very strong anecdotal evidence that the population numbers are increasing to grow. Claims that the east coast GNS population is on the brink of extinction are emotional and without credible scientific validation.

Some of the photo images used in the discussion paper detailing images of hooks and baits within the intestines of GNS would seem to imply that these hooks alone were the cause of the premature death of the specimens that were autopsied. It is clearly evident from the images that the hooks were not affected by erosion and the baits had not broken down in the digestive process thereby indicating that the hooks and bait had only been taken in recent hours and would have not been a cause of death. This was a fact confirmed by DPI staff at one of the GNS community presentations.

Also the veracity and source of the claim that accidental hooking at aggregation and other sites was identified as causing 12 known mortalities per annum is very questionable and contradicts current data provided by the Commonwealth in respect of its yet to be publicly released 2010 GNS Recovery Plan . Given that NSW Primary Industries has studied the mortality impact of recreational hooking upon several fish species and evidenced a very high rate of survival and recovery, even when gut hooked, it is difficult to comprehend that the mortality impact of incidental GNS hooking would be any different. This is an issue where very clearly there is a need for quality research.

Regrettably the discussion paper also makes selective use of the most recent GNS population research estimates as published by Cardno Ecology Lab for DEWHA in connection with the 2010 GNS Recovery plan. The Cardno report did project the following population estimates -

	Total Sample	Lower	Upper
Population estimates	1315	1104	1601
Adjust for unmarked population	1365	1146	1662
Adjust for potential site fidelity & unmarkable population	2142	1465	3249

These figures contrast to 2003 figures projected by Ottway & Burke –

	443	263	766
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To suggest that the GNS population is now between 1000 – 1500 individuals is misleading. However it is pleasing that official estimated numbers of GNS are no longer in the region of 400 as commonly quoted by many commentators.

It is also concerning that the discussion paper concedes that there is only anecdotal evidence to suggest that there has been an increase in the population numbers over the past decade and it is disappointing that there is no acknowledgement that the 2002 GNS Recovery Plan has achieved any degree of success. Clearly there has been a sizable increase in GNS populations in those areas where the research has been carried out and the protective measures introduced by the commonwealth are achieving a degree of success. It is also highly probable that the earlier research substantially underestimated population numbers. We have no doubt that with further and improved research techniques the number of species identified and recorded will continued to grow. Even though the Cardno estimates do make some allowance for site fidelity and unmarked populations, it is a matter of fact that no juvenile GNS or deepwater populations were identified and recorded. Furthermore those researchers involved with the Cardno project candidly admit that prolonged adverse weather conditions did restrict their capability to dive at many of the new aggregation sites identified by recreational fishers and did hamper their research methodology.

#### **Where to From Here.**

It is imperative that prior to any new management decisions being made by the NSW government in terms of protecting and preserving GNS species that decision makers be cognizant of the findings and recommendations contained in the 2010 commonwealth GNS Recovery Plan yet to be publicly released. Without breaching any confidentiality protocols there are a wide range of positive and constructive recommendations embraced within the draft plan document which if adopted will positively contribute towards the effective ongoing management and preservation of GNS species. Such recommendations include but are not limited to a need for ongoing survey / assessment of GNS populations – the development of a national data base for GNS interactions – greater collaborative community involvement in the collection and recording of data on GNS interactions (photo and details of unintentional captures – participation on diver surveys), assessment of the effect upon mortality and reproduction of different fishing practices and tackle use. Interestingly though, expansion of aggregation sites and additional restrictions on recreational fishing activities are not specifically cited in the plan.

It is essential that at some time post the receipt and review of all submissions that a stakeholder working group be established by the Department to allow a healthy and informed assessment of any recommendations that flow from the review process. ANSA would

welcome the opportunity to be part of such a working group. Hopefully the Commonwealth GNS Recovery plan will by then be in the public arena and constructively taken into account for the development of any NSW state management plan. There is not a pressing need for immediate action as urged by some quarters but a genuine need for a thorough and transparent assessment of all aspects of GNS science and related factors to ensure that a realistic and achievable state management plan is ultimately delivered.

### **Some Specific recommendations**

**Ongoing GNS Research.** ANSA strongly encourages further research into GNS population numbers in both shallow and deep water and the broader involvement of the community in achieving this. The scientific community must be prepared to accept that there is a functional role for community involvement in the gathering and collection of research data. Proper supervision is a critical must but this is not an unrealistic challenge. Research should not only focus on GNS numbers but on all issues that have or potentially have an impact on the health of the species. Such issues must include environmental /habitat degradation, food chain impacts, diver impacts, commercial and recreational fishing impacts and a realistic assessment of the impact of ingested hooks upon GNS mortality.

**Existing GNS aggregation sites.** It would be beneficial for there to be a consistent and simpler geographic regime for setting the boundaries and zones within aggregation sites. The current mapping process is difficult to comply with even with the use of GPS mapping systems. There should be a review of state and commonwealth protection zones including those and those within marine protected areas to ensure as much conformity as is possible and to give consideration to seasonal fishing restrictions as opposed to total closures. The need for preservation of aggregation sites, such as Bass Point and Montague Island where the sighting of GNS is now rare, requires reassessment. It is also very unlikely that the reported incidence of GNS hooking are in fact occurring at designated aggregation sites given the fishing and tackle restrictions that have been imposed at those locations for some years now. It is much more plausible that any incidental hooking occurs across all east coast waters either when GNS are either travelling between sites (established and otherwise) or foraging for food. Any increase in the size of existing proclaimed GNS aggregation sites could not be expected to reduce the incidence of incidental hooking

**Recreational Fishing Practices.** ANSA strongly encourages the use of circle hooks for all fishing activity and also discourages the use of stainless steel hooks for demersal species fishing. The use of these hooks can reduce the impact of gut hooking and expedite the decomposition of hooks where the latter might occur. ANSA also encourages the use of breakaway trace lines (ie a short length of lighter breaking strain line at the end of a heavier main line) and the use of biodegradable line.

Based upon recent studies (Robbins/ Peddemors) completed in respect of the interaction of GNS with recreational baits, hooks and lures, we would advocate the continued use of lure trolling, fly fishing, artificial lures and baits and jigging (without glow sticks) within all existing critical habitat zones. We would also advocate an ongoing restriction on the use of stainless hooks, wire traces and live bait (trolling excepted) and burying within 500m of a critical habitat zone. We would also advocate that spearfishing, given its unique and discriminate style of fishing activity, be allowed at all established GNS aggregation sites.

We would also encourage the introduction of a simplified process for the reporting of GNS interaction by NSW recreational fishers and the recording of any data that could be beneficial to ongoing research such as photo id, estimated measurements etc and health condition. Safe handling processes for the dehooking and release of GNS would be welcomed.

**Commercial Fishing Practices.** ANSA is very concerned that set lining for wobbegong sharks is an allowable commercial fishing activity under the trap and line fishery. Given that these species do enjoy a common shallow water reef habitat with GNS it is beyond belief that the commercial sector is still allowed to target this species with baited set lines. A zero limit for wobbegong should apply to all manner of fishing. It is also of some concern that the commercial fishing of migratory shark species such as whalers is allowed on the NSW mid north coast. The potential impact of this boutique commercial fishing activity upon GNS populations needs to be fully assessed.

**Eco / Tourism activities.** ANSA has some concern with the intrusive activities of the eco dive tourism industry upon GNS aggregations. It is acknowledged that an industry voluntary code of conduct for diving at GNS aggregation sites does exist but there are many diving groups that have no knowledge of or regard for these guidelines. ANSA does not subscribe to the concept that all recreational scuba divers must have a permit or pay a fee to dive at aggregation sites. This is an unnecessary infringement on access rights and would require a compliance regime that would be impossible and costly to police. ANSA would welcome a better community awareness of the code of practice amongst scuba divers and a review of the code to include a restriction on the number of persons allowed to dive on any particular day and the duration of any diving activity.

**Aquaria Management.** ANSA would encourage a review of the current commonwealth moratorium on the collection of wild GNS species for public aquariums and research facilities.

**Shark Control programmes.** ANSA does not have a particular view on the continued use of shark mesh nets to protect beach swimmers. ANSA is mindful of the harm that these nets can generate for large marine species generally and we believe that this is a topic for further analysis and review by appropriate management bodies.

**Conclusion.** ANSA would take this opportunity to express its gratitude for having the opportunity to present this discussion paper. We would also welcome the opportunity to engage in ongoing consultation and dialogue with the Department of Primary Industries and other stakeholders

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Burgess', written in a cursive style.

John Burgess  
Executive Officer/ Director  
ANSA Ltd