



Tom Rayner

Spearfishing in Sydney: A Photo Journal

Welcome to the Eastern Suburbs of Australia's largest colony: equal parts parking meters, crowded sands, inquisitive kids, indie chicks, burnt backpackers and surfing tradies. A fast-paced land of generalisations and pigeon-holing, where hypocritical hispters sign petitions for greater marine protection (whatever that may mean) before 'checking-in' at local sushi trains. While they'll try to convince you otherwise, most people here know nothing about spearfishing and less about conservation. Why would they? Once you get your head around that, spearing in the Eastern Suburbs, and everything that comes with it, will become positively entertaining.

You'll find the spearfishing pretty diverse and surprisingly consistent. The rocky reefs, sand lines and walls support resident bream, drummer, mulloway (allegedly), red rockcod, goatfish, blue mowies, squid, cuttlefish and crays (both easterns and slippers). Between swells, the visibility is typically 10-12 m, but can reach 20 m+ after a few days of puffing southerly breeze. Over summer, the East Australian Current delivers batches of kingfish, bonito and other delights, like mangrove jacks and the odd blue-barred parrotfish. Given the hassle of towing boats around the city, rock-hopping is the preferred M.O., but dolphinfish are available at the FADs if you can escape mid-week annoyances (like work). Stay out of the water following rain - the sewerage needs attention.

Your mentors will be a generous and articulate bunch of fellow spearos, some with high-level tertiary degrees in environmental science and marine biology. Like them, you too will become obsessed

with custom floats, surf cams, weather apps, and post-dive Portuguese chicken burgers. You may join one of the several clubs, train in the pool or partake in the strange phenomenon that is competition spearfishing. Before long, you will be well versed in the minutiae of the Fisheries Management Act 1994 (NSW) and its regulations. You'll develop a healthy disdain for those ignorant of their own coastline and your interaction with it. With time, this may extend to an ironic ambivalence toward the blue groper - that iconic, flagship species protected by spearfishers since 1969, but which recently headlined a bid to extend the Clovelly reserve northwards past Bondi and into the harbour.

You see, whether you like it or not, your pursuit of kings and crays will cut straight to the heart of three key issues in conservation management currently faced by modern Australia: the planning of protected-area networks; self-regulation by extractive users; and hunting's place in 'civilised' society. As a spearfisher you may sell yourself as a 'conservationist', but will you be? You may be driven to target large-bodied trophy fish or tempted to take barely-legal ones when the cupboards are bare. Research shows that both forms of fishing can have strong effects on fish populations if left unchecked, resulting in changes to fish size at a given age and the time taken to reach sexual maturity^{1,2}. As you gain experience, you will increasingly realise the importance of acting responsibly below the waterline.

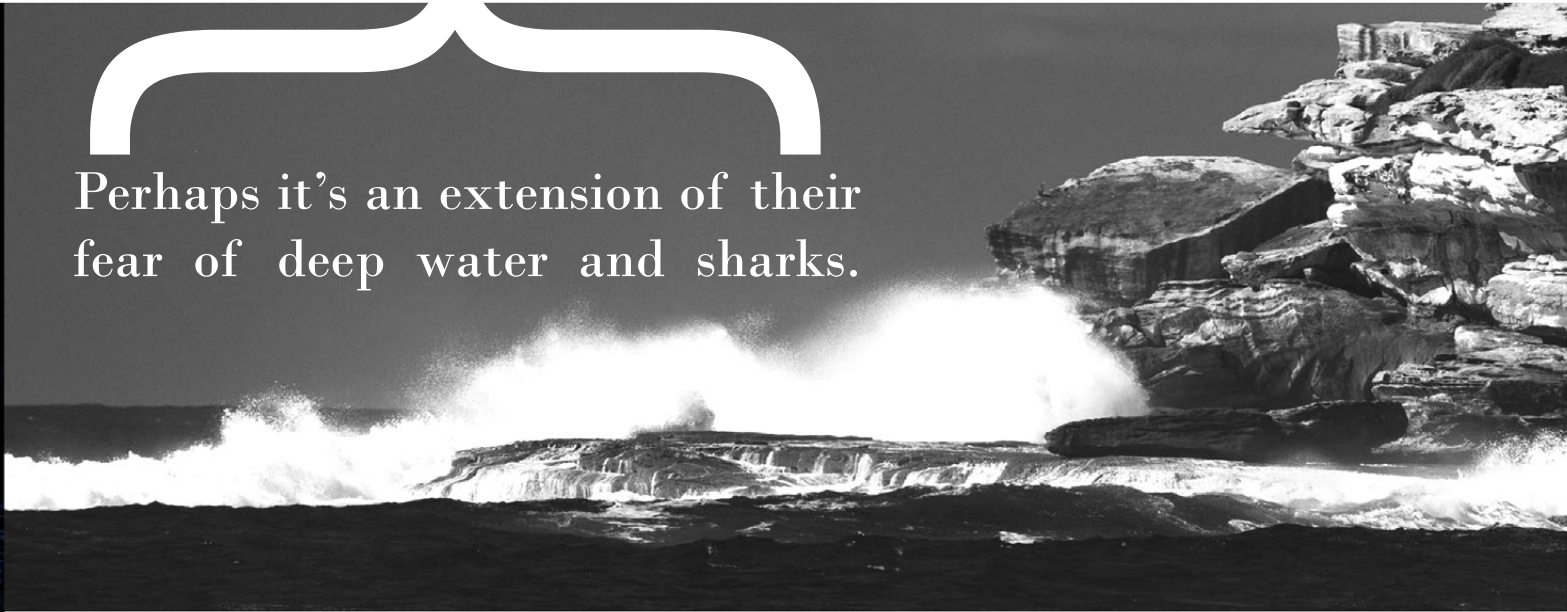
However, your land-based behaviour may prove equally important, for Sydneysiders seem to feel a primeval threat from spearfishing. Why, is unclear. It can't be the peer-reviewed analyses of evolutionary ecology - people don't read the scientific literature.

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Perhaps it's an extension of their fear of deep water and sharks. Perhaps they see the harvesting of wild animal populations by individuals as invasive. Maybe it's all the camo? In reality, a combination of factors is probably at work. The problem for spearfishers is when these fears manifest as misguided, albeit potentially well-intended, fear mongering in the local press. It is particularly concerning when such articles include factual errors.

To cite the most glaring example, in late 2010, Barry Paxman, a renowned WA spearo, became embroiled in the debacle. A photo of him with a record, legally-speared western blue groper (*Achoerodus gouldii*) was published without consent in Bondi street rag *The Beast*, alongside an article about protected areas and fishing pressure in the Eastern Suburbs. The caption read, 'If you see this guy, you should consider stabbing him to death'. Sydney spearos were quickly up in arms, understandably offended and defensive. The article was retracted, but only Paxman's commendably-calm response seemed to save the editors from legal action. Since then, Dan Trotter, a Sydney-based, self-confessed 'fishing addict', has penned a number of informative articles for the magazine, educating readers on fishers' efforts to improve their own sustainability

and encouraging greater enforcement of existing rules.

The whole discussion raises a broader question: given that limited resources are available for conservation, should we preserve ecological 'hotspots' to maximise the protection of biodiversity, or establish protected areas in human-modified areas to promote community education and engagement? To date, the NSW Marine Parks Authority has formally stated that their focus is on the former, rather than the later. The current network of marine reserves in NSW is testament to that approach: it's why there are parks in Port Stephens and Jervis Bay, but not in Sydney. While the harbour and adjacent coastline is certainly biodiverse and ecologically valuable, it is evidently not a great candidate for a marine park in the context of a statewide conservation-planning framework.

Marine parks are contentious at the best of times. Research shows they can significantly the size, biomass and fecundity of fish within no-take zones^{3,4}, but that spillover extends an average of just 1300 m from the boundary of these areas, with fish densities quickly dropping to 5% of within-reserve maxima⁵. By using algorithms in the development of zoning plans, ecological benefits can be maximised and costs (both economic and social) can be minimised⁶. However,

these are just decision support tools. Society is responsible for establishing conservation targets that can be used as inputs for this software. How much of each species or ecological community do we want to protect?

When you start spearing in Sydney, you will become, by default, an advocate for sustainable food production and good fisheries management. Spending time finding your cray spots (and subsequently guarding them) will only be the start of the learning curve; the rest will be developing an understanding of how your spearing fits into the bigger picture and learning how to disarm and educate punters on the beach, in the carpark and online. Honest, open, evidence-based discussion and education is the only way we can all ensure a future of well-protected marine ecosystems and quality spearfishing on Sydney's doorstep.

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1. Stergiou (2001). *Fisheries Research* 55:1-9. 2. Law (2000). *ICES Journal of Marine Science* 57:659-668. 3. Sluka et al. (1997). *Proc. 8th Int. Coral Reef Sym.* 2:1961-1964.4. Russ & Alcala (2000). *Ecological Applications* 13:1553-1565. 5. Haplem et al. (2010). *Environmental Observation* 36(4):268-278. 6. Airamé et al. (2003). *Ecological Applications* 13:170-184.



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