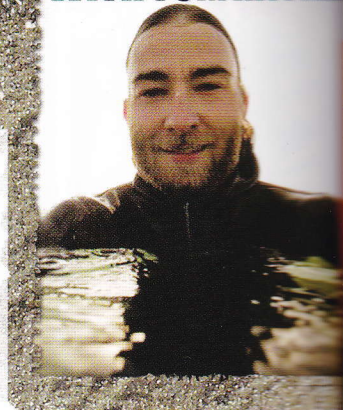


STRAIGHT SHOOTING

WITH TOM RAYNE



Lunacy (n.) 1540s, "condition of being a lunatic," Originally in reference to intermittent periods of insanity, such as were believed to be triggered by the moon's cycle. The Old English equivalent was *monaðseocnes* "month-sickness."



Earth casts its shadow over the moon during a lunar eclipse, as seen from Western NSW, December 2011.

How many times have you seen a full moon rising, or a pale white moon standing on a bright blue midday sky and been surprised? 'Huh?!. There's the moon.'

That used to be me, the moon came and went. Every now and then, it was glowing red and full, over the sea, the tide went up and down, but only a bit. I read about the moon affecting fishing, but it never really seemed to make a difference – I still never saw Jewfish. I was like, 'No big deal, right?'

Then, I moved to Darwin, where the tide moves up to 7m every few hours - Seven - Metres - Every - Few - Hours. Acres of sand flats had rivers of saltwater rushing over them, tinnies were getting stranded, like confused little bath toys. Local divers told me, you can only dive on the neaps. I was like, 'No shit! Wait, what's a neap again?'

Neap tides are when the difference between high and low tide is least; the opposite of spring tides, they occur twice a month, when the tide-generating forces of the quartering moon are opposed by those

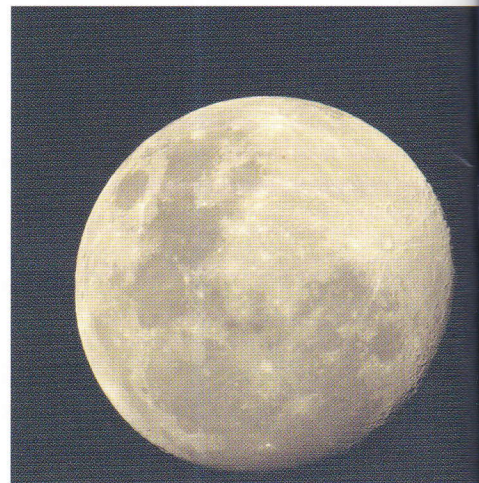
of the sun. Critically for Darwin's spearos, the reduced water movement during a 'set of neaps' can allow sediment to settle and dramatically improve vis. Such tides, also dramatically reduce the risk of getting 'locked out' by a low tide and not being able to retrieve your boat for another 6 hours – I've already joined that club, but that's another story.

Research has found some interesting relationships between delicious critters and the moon. For example, catch-per-unit-effort (CPUE, a standard measure of fishing efficiency) of rock lobsters in Western Australia displays a 14-day cycle corresponding to the lunar cycle¹. More lobsters are caught during the new moon than during the full moon. However, no difference is observed in the size of lobsters caught using pots versus diving. So, diving at night during a new moon, should result in the best cray catches for spearos – although you won't catch me diving for crays at night in WA any time soon.

In the case of fish, lunar-synchronised

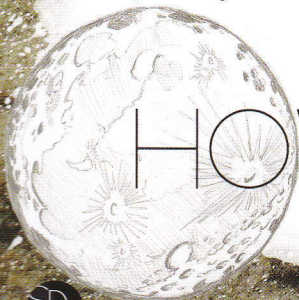
movement and spawning activity has been reported in a range of species², including many from the order Perciformes (that comprises about 40% of bony fish). In one study, a group of 80 Yellowtail kingfish (*Seriola lalandi*) ranging from 75 to 105cm, was observed spawning in the Gulf of California three days before the full moon, at densities more than 600 times greater than normal³. However, scientific evidence of widespread effects on CPUE for fish, is not forthcoming.

Anecdotal analysis and advice from line fishermen is patchy and conflicting as always. Some recreational fishing logs have revealed interesting correlations between total catch and the daily rise and set of both the sun and the moon, with captures of big fish appearing to be correlated with the few days following peak moon phases (full and new moons)⁴. Most of this info, can be distilled in rules of thumb, such as, fish the last hour of a rising tide that peaks after sunset, on the day of the new moon, as the moon rises⁵. Basically, when the elements combine.



The almost full moon - a driver of good fishing?

HOWLING AT THE MOON



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A red-tailed black cockatoo flies through a solar eclipse, as seen from Darwin, November 2012.



NT Dolphin Djari Burton with a solid Golden snapper, caught two weeks before the solar eclipse above.

So, does that mean we should restrict all our diving to a few days a month? Certainly not, but in places like Darwin, you don't have much choice. Suddenly the tide becomes THE factor in planning your diving. There are only about 40 days each year when the vis is over 5m. You find yourself sitting on the toilet highlighting the best neap days, months in advance, on a tide chart hanging on the back of the bathroom door. You re-rig all your guns between dives, just in case. You think about training in the pool, but abandon the idea because your girlfriend doesn't know how to respond to a samba. You think about teaching her. You end up drinking goji-berry juice, dodging sniffling toddlers and going to work feeling like death warmed up, because you know you'll need those sickies for the neaps!

Fortunately, when you do get out there and the elements combine to create a day when you can see past the end of your gun, you find fish, after fish, after delicious fish: Coral trout, Mackerel, Estuary cod, Jewfish, Golden snapper and Bluebar parrotfish. This was the case in November 2012, a couple of weeks before the solar eclipse, when we dived the relatively deep Fenton Patches, about 30km offshore from Darwin. We found some wrecks with schools of 15-20 Golden snapper, all 5-6kg, and others, with schools of 20-30 Jewfish, all 10-12kg, and wrecks with combinations of both.

The irony of this, is that the diving in Darwin happens on the first and last quarter of the moon phases, not around new or full moons. These are times when the fishing is supposed to be poor and perhaps it is. Maybe these fish aren't feeding or being particularly active, but I think any spearo will agree, that a school of 30 Jewfish is a welcome sight, irrespective of what the moon is doing. Maybe it's worth checking the lunar phase the next time you come across a few nice fish, or trying some dives during the neap tides at your local spot. 🐟

1. Morgan, G. R. 1974. Aspects of the population dynamics of the western rock lobster, *Panulirus Cygnus* George. II seasonal changes in the catchability coefficient. *Marine and Freshwater Research* 25: 249-59.
2. Domeie, M. L. and Colin, P. L. (1997). Tropical reef fish spawning aggregations: defined and reviewed. *Bulletin of Marine Science* 60(3): 698-726.
3. Sala, E., Aburto-Oropeza, O. Paredes, G., and Thompson, G. (2003). Spawning aggregations and reproductive behaviour of reef fishes in the Gulf of California. *Bulletin of Marine Science* 72(1): 103-121.
4. The Real Scoop by Joe Bucher http://www.solunar.com/the_real_scoop.aspx
5. Summer Swan River Mulloway by Ant Simper <http://tinyurl.com/d9lbjxk>