True Love's Kiss? An Inter-Species Infatuation

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Photo: © Google Images

While the dream of being a millionaire is a far off one for most humans, the same cannot be said for Hawaiian spinner dolphins. In 2013, a single spinner was estimated to "make" \$1,608,882 (USD) in the popular location of Kailua-Kona, Hawaii Island while a single dolphin in Waianae, Oahu was said to generate a staggering \$3,364,316 (USD) due to dolphin swim & viewing tourism (Wiener et. al 2020). What is it about these marine mammals that have them outearning 97% of U.S. households (Lynkova 2021)? While their inviting appearance—with their ever-present smiles and innocent eyes— certainly do help their lovability, I reckon it is also their reputation of being friendly and playful towards humans that make them such a beloved, and expensive, sight to see.

Throughout the history of modern humans, social interactions have remained an important aspect of everyday life. Cooperative social interactions continue to drive the complex societies we inhabit today—from two relatives holding a conversation to different countries importing and exporting goods. Given sociality is the mechanism to the machine, so to speak, it is no wonder cooperative and friendly interactions are highly revered in human eyes. Though humans often consider themselves the quintessential social species, complex social structures are actually prevalent throughout the animal kingdom and at all levels of biological organization (West 2007). In fact, dolphins have found themselves the subjects of an increasing amount of scientific studies in recent years, with many researchers claiming that they exhibit the second-most complex social structures in the animal kingdom.

The Social Brain Hypothesis proposes that the cognitive demands of negotiating complex social relationships can influence the evolution of brain size and activity (Connor 2015). Male dolphins vary in their social structures, forming zero, simple, or nested alliances (Connor 2015). These nested alliances range from 1st order to 3rd order alliances, which can best be likened to forming an alliance with one's family (1st order), one's country (2nd order), and with numerous countries (3rd order) (Connor 2015). In line with the Social Brain Hypothesis, humans and dolphins have the largest brains by body size (Connor 2015).

Our similarities to dolphins not only include social structure and brain size, but also linguistic and cognitive abilities (Herman 2012; Ryabov 2016). Dolphins exhibit a complex repertoire of vocal acoustics, with all the design features of human spoken languages, and even refer to other dolphins by name (Ryabov 2016). In addition, dolphins' sense of bodily agency and mirror self-awareness is more refined than other nonhuman animals (Herman 2012). So maybe as I write this paper exploring why humans are so enamored by dolphins, a pod of dolphins discusses the same question.

While dolphins do exhibit complex social behaviors, such behavior often translates past species boundaries. In fact, many divers have reported stories of having been saved from blood-thirsty sharks by a group of dolphins, though instances of dolphins rescuing humans have rarely been recorded in scientific literature. Moreover, cetaceans are known to demonstrate *epimeletic* behavior, when one or more adults consistently stay near a distressed, injured, or dead individual, keeping said individual afloat, carrying it, and protecting it from danger—even going so far as to engage in rescue attempts (Bearzi and Reggente 2017). While it can't be said for sure whether dolphins rescue humans from dire situations due to genuine concern or simply because they are accustomed to protecting their own from sharks, anecdotal reports of heroic dolphins certainly add to their charm.

Dolphins also exhibit friendly, playful behaviors—both with each other and with humans. Play is thought to provide calves with opportunities to perfect locomotive and cognitive skills, as well as learn important social skills; however, dolphins of all ages play (Kuczaj 2014). Interestingly, dolphins have even been noted to use a variety of objects in their recreational activities—from seaweed, plastic bags, and even sea turtles in wild settings to balls, rubber-tires, and self-made bubbles in captivity (Kuczaj 2014). In truth, this article was inspired by an old YouTube video of dolphins using a red bandana to play "keep-away" with a



Photo: Atlantic Spotted Dolphins swim & play keep away with divers in Bimini | © YouTube

group of divers in the Bahamas (Brave Wilderness 2019). Though extraordinary, this was not an isolated incident of sportsmanship; the divers purposely brought brightly colored bandanas on the dive in hopes of the dolphins picking up the game since the dolphins in the region were known to engage in these inter-species games of "keep- away" (Brave Wilderness 2019). Of course, the dolphins were sure to return the bandana back to the divers once they decided they had played enough for the day—a small act that shows an impressive awareness of object ownership (Brave Wilderness 2019).

Dolphins' amicable reputation is not recent either. Dolphins were the protagonists of many ancient Greek legends, including one featuring the god of wine and pleasure, Dionysus, who forced an entire crew overboard out of anger. Then Poseidon, the god of the sea, took pity on the overboard sailors and turned them into dolphins—tasking them to protect sailors for the rest of time (Dilouambaka 2016). In fact, dolphins were so highly revered in ancient Greece that killing a dolphin was a crime fit for capital punishment (Dilouambaka 2016). Apparently, dolphins understand what a-certain-senator-who-would-rather-jet-set-to-sunny-Cancún-than-help-his-freezing-constituents doesn't: that a good reputation, even one with other species, can go a long way towards increasing your chances of sticking around.



Photo: Black figure Kylix (drinking cup) from Vulci depicting Dionysus crossing the sea, ca. 530 BC | © Carole Raddato/Flickr

Recently, I came across a Twitter thread in which there was a dialogue being had about dolphin behavior. More specifically, the Twitter users were humored by the dolphins' chaotically gregarious sex lives. Upon doing my own investigation, I stumbled across a study that found that

when two short-beaked common dolphin groups underwent fusion, or teamed-up, the fusion act was followed by them spending 30% of their time having sex (Neumann 2001). If humans were to match the sexual proclivities of dolphins, we would spend 4 entire months of the year doing the deed (yes, every single second) (Slater 2011). Clearly, dolphins have us beat... Dolphins:1, Humans: 0.

Another comment in the Twitter thread that stood out to me was "the only thing separating humans from dolphins is that dolphins have not yet figured out how to build things with tools" (I would quickly like to say thank you to this Tweeter for supplying me with discussion material, unfortunately their name has since been lost to my 60k Twitter likes). While it is true that dolphins have not yet evolved into Bob the Bottlenose Builder, before I even the score we must consider that it is not accurate to say that dolphins are at a complete loss when it comes to tools. Indo-Pacific bottlenose dolphins in Shark Bay, Western Australia often tear sponges from the sea-floor and use them to cover their snout as they sift the sand for food—a technique called "sponging" that is passed down from mother to daughter. Recently, Dr. Sonja Wild, a behavioral ecologist at the University of Konstanz in Germany, observed a novel hunting technique that her and her research team termed "shelling." For this technique, which spreads not by mother-daughter bonds but through peers, dolphins trap prey in large marine gastropod shells before shaking the contents out into their open mouths (Wild et al 2020). And the best thing humans spread through peers is planking and TikTok dance challenges.... Dolphins: 2, Humans: -1.

If you only take away one thing from this article, let it be that dolphins spend a wild amount of time engaging in sexual activities yet still manage to generate millions of dollars a year; if we all have the same 24 hours then boy do dolphins know how to finesse them. Oh yeah, and also that underneath their lovable exterior, dolphins are actually quite an incredible species. Not only are they immensely adapted to their ecosystems— engineering ways to hunt with the aid of tools and acting on the defense to protect each other from predators like sharks— but they also have extremely complex social structures and advanced cognitive and linguistic abilities. It is hard to pinpoint what exactly makes humans go all heart eyes when it comes to dolphins, but it seems quite safe to say that it may be in part due to their cooperative and playful tendencies that remind us a bit of ourselves.

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