

October 23, 2016

## **On behalf of the Cetacean Commonwealth:**

**Toward Mutually beneficial Harmonious Cetacean-Human Co-species Partnerships:  
Comments regarding NOAA's proposed rules concerning dolphins**

**A Critique of the NOAA data and procedure on dolphins and humans**

by

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### **SUMMARY**

**We support Alternative 1 – No Action; We suggest Alternative 6  
We request an extension of the comment period to evaluate NOAA's proposals.**

We demonstrate that the NOAA case for separating humans and dolphins fails to be supported by any strong evidence of harm or disturbance and has yet to incorporate the extensive Citizen Science offered by the community and which must be incorporated if NOAA is to use the best available science. In particular, the NOAA reports have zero in-water observations.

In addition there are questions of law, of procedure and conflicts of interest, and the apparent evidence that NOAA has pre-determined their desired outcome prior to public comment and community meetings. We feel this situation calls into question if NOAA is following proper procedures.

NOAA is following recommendations from the Marine Mammal Commission, which generates reports on which NOAA bases their rulings. These papers present only preliminary data which is far from conclusive regarding the potential impact of humans on dolphins. The data are too weak to justify the current NOAA proposals yet are shored up with assumptions, conjectures and presumptions. More research is needed and *this need for more research is clearly stated in the referenced papers themselves.*

The main paper with recommendations on policy was contracted by the Marine Mammal Commission from Amy Samuels, et al. entitled “*A Review of the Literature Pertaining to Swimming with Wild Dolphins*” published in April 2000. The paper strongly urges solutions that include forced segregation of humans and Cetacea and this is directly mirrored in the current NOAA proposals.

Such proposed rules are a form of *apartheid* which *ignore* our historic right to swim or respectfully visit our dolphin friends.

The NOAA database on such matters has hardly changed since the year 2000. One notable exception is the thesis work of Julian Tyne in 2015.<sup>1</sup> Interestingly, Tyne concludes that: “*The results of this study didn't show any significant negative effect on the behavioural response of the spinner dolphins to human activities. This could be a consequence of the lack of control data and the tolerance of the dolphins to the chronic exposure to human activities. However, chronic exposure experienced by the spinner dolphins and the negative behavioural responses from populations elsewhere suggest a precautionary approach to the management of this spinner dolphin population.*”

**Comment:**

1. In contradiction to Samuels, et al., Tyne concludes that there may be a “*tolerance of the dolphins to human activity*” which makes them an *habituated* population. So Samuels was wrong in calling them “*unhabituated*”. They are also habituated to humans by long-term contacts with the native Hawaiian people and by contacts with the current community that swims with them.

2. Despite the utter failure in the NOAA referenced literature to find *any* significant effect of humans on the dolphins, Tyne suggests implementing strong controls *anyway*...

With this kind of reasoning you can conclude *anything* you want, or just make something up. This puts the lie to the idea that the proposed rules are in any way a “*science based*” decision on the part of NOAA. The obvious bias of Samuels, et al. and Tyne that humans in the water are bad for the dolphins is repeated in Tyne’s latest study... despite an admitted lack of significant negative effects!

This same lack of effects of humans on dolphins is reported in Katharina J. Peters, et al., First Insights into the Effects of Swim-With-Dolphin Tourism on the Behavior, Response, and Group Structure of Southern Australian Bottlenose Dolphins, Society For Marine Mammalogy, Marine Mammal Science, 2012 and we quote:

“*Nevertheless our results indicate that the dolphins do not perceive the swimmers as a*

*threat, and therefore do not appear to seek enhanced group protection by decreasing interanimal distance.”*

In addition, there is the issue of correlation and causality. Even IF studies had found a decrease of dolphin numbers, for example, one must then demonstrate that it was related to boats and swimmers rather than numerous other possibilities. ONLY if boats and swimmers are *proven* to cause great harm are the NOAA draconian measures perhaps justified.

We note that many reports from a recent community meeting maintain that the numbers of Spinner dolphins are actually increasing. Captains, for example, are in the process of reviewing their logs. This is one reason to extend the comment period.

It is ludicrous and absurd... to punish the people of Hawaii, the visitors that wish to come here in part to experience dolphins... without any firm evidence of harm. This proposed “rule” deprives us all of due process, and ignores the dolphins’ choices, their sovereignty, their agency and sentience, while subjecting humans to a potential felony charge and fine based on **WHAT?** – a quasi- religious belief that humans in the water with dolphins is a “*bad thing* in spite of NOAA’s own data which shows minimal to zero effects after years of study?

We ask NOAA – **Where are the studies show any strong evidence of harm? SHOW US THE DATA!** We also ask: **Where has NOAA included Citizen Science?** Even though NOAA praises all their citizen science efforts on their website, NOAA has *totally ignored* the local community, our extensive knowledge and our collective experience.

In short, there is zero firm evidence that the Hawaiian Spinner Dolphin population is on the decrease, partially because we have yet to agree on a way to count the dolphins and obtain an accurate figure. Research has yet to show there is adverse correlation between Human Swim Activity and the health or population size of the Spinner Dolphins.

Coordination and education around wild dolphins swim activity is appropriate to insure that the rights of dolphins to have free will encounters with humans is preserved for future generations of both species. We support conscious and responsible encounters between humans and free dolphins founded on an interspecies ethical perspective that includes our role as co-inhabitants and stewards of this planet yet without the assumption that we have any right to make decisions for these sentient animals of extremely high intelligence.

Where has NOAA factored in the consciousness, sentience, agency, choice, sovereignty or the rights of the dolphins to free choice? *There is a right of free association among consenting species that should be upheld.*

3. As to the **funding** of Tyne's 2015 research... in his thesis it states: "*Project Funding of this research was made possible by the financial commitment of the National Oceanic and Atmospheric Administration (NOAA), The Marine Mammal Commission, Murdoch University and Dolphin Quest.*"

The inclusion of funding by Dolphin Quest opens the question of an obvious conflict of interest and collusion with NOAA and its rule making procedures. Dolphin Quest has a vested interest as a provider of dolphin swims with dolphins under human care at the Hilton Waikaloa and the Mandarin Hotel on Oahu. Dolphin Quest stands to be given a lucrative monopoly on dolphin swims in Hawaii should the suggested NOAA rules be put in action.

These points were missing from the NOAA slides shown at the public meetings or press releases, and a NOAA official actually denied it at the first public meeting in Hawaii, before her colleague grabbed the mike to reassure everybody "*it was only a little bit of money, and right at the end.*"

Here is another study Dolphin Quest funded:

**From:** <https://dolphinsquest.com/completed-studies/field-studies/#fsr31> , the Dolphin Quest website...

**Estimating Abundance of Spinner Dolphins off the Kona Coast of Hawai'i as Time/Area Closure Management Actions are Implemented**

**Project Investigator** – David Johnston

**Affiliate Organization** – Duke University Marine Laboratory

**Dolphin Quest Supported** – 2012

**Project Description**

- ◆ To further establish the abundance and vital rates of spinner dolphins occurring in Hawai'i
- ◆ Continue collection of photo ID data

**How interesting!!**

**Notice:** Even the title of this research project strongly implies that NOAA has already *made up its mind and is already hiring the groups to do the BEFORE and AFTER studies.*

Is this whole escapade of public meetings and comments just a show? What is the point of engaging the public if NOAA already knows what they are going to do? Why waste everyone's time and effort thinking they could actually change something? Is this proper? I understand that the TMT was stopped because a permit was issued before public hearings. This may be a similar case. It can also be argued that NOAA is complicit in helping Dolphin Quest interests by its rulings in return for research funds from them.

And now, in addition, we see evidence that NOAA has already pre-determined the outcome of their rule making, totally ignoring the public and the stake-holders. Does NOAA actually intend to listen to anyone's comments?

### **NOAA – what is your position on these matters?**

4. NOAA is attempting to *change the law* – regarding harassment.

**MMPA page 6** (13) The term “take” means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.

(18)

(A) The term “harassment” means any act of *pursuit, torment, or annoyance* which—

(i) has the potential to **injure** a marine mammal or marine mammal stock in the wild; or

(ii) has the potential to **disturb** a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

From page 119 of the Draft EIS:

*Threat Types: •Swim-with interactions*

*- human activities that involve closely pursuing or approaching spinner dolphins to swim near the animals or activities that include people floating in the water with the intent of having the animals swim nearby*

The bias of NOAA is shown above where even just floating in the water is a “threat.” Clearly, swimming without intent to pursue, torment or annoy fails to meet the criteria of harassment. To make **swimming** into **harassment** is thus *changing the law*. Therefore, the NOAA rule change is against the law because it would change the meaning of harassment without legislative due process.

5. Equal protection of the law.

The fact that NOAA awards permits to the Navy, geological surveys, fishing companies, etc. that allow massive takes of marine mammals which NOAA rules “negligible”, while now targeting friendly, respectful swimmers, violates the equal protection principle that the law shall be applied equally.

From your Draft EIS page 161:

*“The U.S. Navy has received two Letters of Authorization (LOAs) from NMFS to take a specific number of marine mammals under the U.S. Navy Training and Testing Activities in the Hawaii. The LOA for training allows for 11,060 (approximately 2,212 per year) spinner dolphins to be taken by Level B harassment over the 5-year period from 2013 to 2018 (NMFS 2013a), and no spinner dolphins to be taken by Level A harassment. The LOA for testing allows for 835*

*(approximately 167 per year) spinner dolphins to be taken by Level B harassment, and 5 (approximately 1 per year) to be taken by Level A harassment over the same 5-year period (NMFS 2013b)."*

So NOAA allows PacRim exercises to proceed and ignores takes by the Navy. Is NOAA presenting this current rule proposal to look better after allowing massive takes by military and industry?

Perhaps swimmers (who have *caused exactly ZERO actual takes of dolphins*) could apply to NOAA for an exemption, just like the Navy does. This would be more than fair. The impact of swimmers is certainly negligible if the Navy takes are considered "negligible."

6. NOAA should deal with real threats.

While concerning themselves with swimmers, NOAA is ignoring other clear and present threats to the dolphins such as Monsanto and other pesticide companies that poison the environment on land and which then flows to the sea and out on the reefs and then concentrated in the tissues of dolphins. **Why is NOAA protecting Monsanto?**

Other obvious threats are fishing bycatch and entanglement. Some 3000 plus Spinners are still killed every year in the eastern Pacific. The WDC report, 'Shrouded by the Sea' reveals that the entanglement of whales, dolphins and porpoises in fishing nets kill more than 300,000 worldwide each year. Presence of feral cats puts the dolphins at risk of toxiplamosis. Some 80% of the dolphins on the US east coast are infected and expected to die from morbillia virus. Fish stocks are dropping and one of NOAA's main tasks is to protect fish stocks. This would also protect Cetacea by insuring their food supply, which is dwindling in many places.

Below is a summary of the status of marine mammals that are under your nominal stewardship in implementing the Marine Mammal Protection Act.

Category	Species	Subspecies/populations	Total
Critically Endangered	2	16	18
Endangered	7	10	17
Vulnerable	6	6	12
Near Threatened	5	0	5
Least Concern	22	0	22
Lower Risk/Conservation Dependent*	0	2	2
Data Deficient	45	4	49
Total	87**	38	125

**Therefore, NOAA should take on real threats rather than harassing people who are friends and stewards of the dolphins.**

## 7. Economic Impact of the proposed rules is Minimized

From page 187 of the DEIS: “*NMFS does not believe that the impact from implementing the preferred alternative would exceed \$100 million per year, or adversely affect the economy or sector of the economy in any material way.*”

We feel that this is wrong, especially factoring the growing interest in whales and dolphins, estimated at about 8% growth per year in Cetacean related ecotourism. Hawaii now has a planetary status as a place one can come to meet the dolphins in their natural habitat. We suspect millions have Hawaii and the dolphins on their “bucket list”. There is a ripple effect here that is significant. For example, whole conferences choose Hawaii in part because of the chance to meet the dolphins. People sense their wonder and are often transformed by their experiences and return many times. Economically, one must include the air fare, meals, lodging, rental vehicles, boat excursions etc. This has a considerable impact on the Hawaii economy which would be lost with your rulings. **We feel this development of many wishing to meet the dolphins can be a good thing, and certainly brings up many issues to be dealt with.**

We sympathize with the concerns of NOAA and would be the first to change behavior if it were clear that our dolphin associations were having significant negative effects. NOAA’s data ONLY includes observations from cliffs and boats and they have zero knowledge of how it is up close and in the water.

The main point here is that Hawaii is gaining a growing economy from people all over the world who want to meet the dolphins and *this needs to be accommodated* rather than stopping our important growing relationships with the Cetacea.

The mission of the Department of Commerce, which includes NOAA is: “*to create the conditions for economic growth and opportunity. The Department works with businesses, universities, communities, and the Nation’s workers to promote job creation, economic growth, sustainable development, and improved standards of living for Americans.*”

Are the NOAA rules, which would negatively impact especially the island of Hawaii, consistent with the goals of the Department of Commerce? We propose that when our community and NOAA work together, we can insure BOTH the welfare of the dolphins and the desires of the community and humanity world-wide.

We have the in-water data missing from your current decision making process. We can complement and enhance each other. Together we can make a unique situation better!

This opportunity is consistent with the Delphic Tradition. **People want to see dolphins and whales and learn from them.** We continue to have transformative experiences with these superlative creatures and wish to expand what we know. We feel it is crucial to the survival of our young, brash, violent species to be educated by creatures that have larger brains, of human quality (or better) that have lived in harmony with each other and the planet for at least 13 million years. They have a lot to teach us, and it is well worth it to come together to help this effort grow.

We are passionate about this in part because NOAA's proposals come just as we are making significant strides in our research to understand dolphin communication so that we can communicate with them. One goal is to have objective, verifiable communications that would be acceptable in a court of law. When we have that, the dolphins, already recognized as "non-human persons" by India will be dealt with through contracts and other means that will secure their full rights as wise, intelligent representatives of the oldest cultures on Earth with the largest brains and an evolutionary history at least five times older than the time humans have been classed as the genus Homo.

In our recently published paper<sup>2</sup>: Jack Kassewitz, Michael T. Hyson, John S. Reid and Regina L. Barrera, A Phenomenon Discovered While Imaging Dolphin Echolocation Sounds, J Marine Sci Res Dev, 6:4, 2016.

<http://www.omicsonline.org/open-access/a-phenomenon-discovered-while-imaging-dolphin-echolocation-sounds-2155-9910-1000202.php?aid=76570> , we show that sonic shapes are created by dolphin echolocations that can be recovered using a Cymascope which uses a vibrating layer of water to visualize sounds. We found that objects echolocated by dolphins are recreated in the vibrated water layer!

We continue to investigate and feel that this phenomenon may be key to understanding dolphin communication which may be *sono-pictorial*. This is just the start of our studies which promise a breakthrough to understand many dolphin communication issues. Our current paper is just the tip of the iceberg and we are making rapid progress.

**It is ironic that NOAA has chosen this very time to attempt to limit our contacts with the dolphins at the very time we may be on the threshold of full communication with them.**



## Why dolphins and humans want to associate

In sociobiology it is known that altruistic behavior is shared according to the degree of genetic similarity, as shown, for example, in the behavior of ants. It is now known that dolphins share more genetic similarities with humans than any other creature<sup>3</sup>.

See:

<http://www.reefrelieffounders.com/science/2010/10/21/articlesafari-dolphin-dna-very-close-to-human/>

Therefore, we suggest that the mutual attraction of humans and dolphins has deep roots in genetic similarity. We also suggest that this is one of the reasons dolphins generally treat us well. In fact, John Lilly said that the *“most important thing he learned about the dolphins was that they are ethical beings that put humans in a special category and go out of their way to keep us safe.”* This means that the mutual attraction of humans and dolphins is very deep both historically and now genetically motivated. Therefore, such contacts will continue and therefore, **As opposed to criminalizing swimming, we must come up with solutions that honor our historic relationships with the Cetacea.**

## REFERENCES

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<sup>1</sup> Julian Ashwell Tyne, A scientific foundation for informed management decisions: Quantifying the abundance, important habitat and cumulative exposure of the Hawaii Island spinner dolphin (*Stenella longirostris*) stock to human activities, Doctor of Philosophy Thesis, Murdoch University, 2015.

<sup>2</sup> Jack Kassewitz, Michael T. Hyson, John S. Reid and Regina L. Barrera  
Kassewitz et al., *J Marine Sci Res Dev*, 6:4, 2016.

<http://www.omicsonline.org/open-access/a-phenomenon-discovered-while-imaging-dolphin-echolocation-sounds-2155-9910-1000202.php?aid=76570>

<sup>3</sup> <http://www.reefrelieffounders.com/science/2010/10/21/articlesafari-dolphin-dna-very-close-to-human/>

*“Dolphins are marine mammals that swim in the ocean and it was astonishing to learn that we had more in common with the dolphin than with land mammals,” says geneticist Horst Hameister. Busbee says, “If we can show that humans are similar to dolphins, and anything that endangers dolphins is an equal concern for humans, it may be easier to persuade governments to keep oceans clean.” “We started looking at these and it became very obvious to us that every human chromosome had a corollary chromosome in the dolphin,” Busbee said. “We’ve found that the dolphin genome and the human genome basically are the same. It’s just that there’s a few chromosomal rearrangements that have changed the way the genetic material is put together.”*