



Spinner Dolphin Human Interaction Environmental Impact Statement

Ways You Can Communicate Your Comments:

•Orally

- indicate on the sign-in sheet that you wish to speak; or

•In Writing

- turn in your written comments on the sheets provided here tonight; or

-mail your written comments to:

Chris E. Yates, Pacific Islands Regional Office, 1601 Kapiolani Blvd. Suite 1110, Honolulu, HI 96814; or

-email your comments to: Spinner.Scoping@noaa.gov





Spinner Dolphin Human Interaction Environmental Impact Statement

Public Scoping Meeting

Kapaa, Kauai, HI

October 19, 2006

**Pacific Islands Regional Office
NOAA Fisheries**





Welcome and Introduction



NOAA 2006

**Moderator:
Linda Colburn**





Scoping Meeting Locations

- October 17 – Honolulu, Oahu
- October 19 – Kapaa, Kauai
- October 25 – Kihei, Maui
- October 26 – Kailua-Kona, Hawaii





Scoping Meeting Agenda

- **Information on scoping process**
- **Overview of wild spinner dolphin population status**
- **Overview of current research**
- **Background on rulemaking process**
- **Background on NEPA process**
- **Review of proposed action, purpose and need, and alternatives**
- **Public comment period**
 - Potential effects, concerns, alternatives, and environmental considerations to be addressed





Scoping Meeting Procedures

- Please sign in at the registration table to present oral comments
- Written comments may be turned in tonight
- Transcripts of tonight's meeting are being captured by a court reporter and/or audio taped
- Please write any questions on the Post-It sheets provided in your info packet – we will collect these at the break





Introduction

Dolphin tourism has recently seen an increase in popularity in the main Hawaiian Islands, resulting in more demand for close human interaction with dolphins. As a result, tour operations and people seeking individual encounters have also increased in numbers.

NOAA Fisheries wants people to be able to view and enjoy Hawaii's spinner dolphins, but do so in a way that does not threaten the health of this population.

NOAA Fisheries is also very concerned that the types and frequency of human-dolphin interactions occurring in Hawaii may result in negative impacts to both individual dolphins and the population as a whole. These activities cross the boundary of responsible wildlife viewing.





Intro Continued

Spinner dolphin's natural behavior is to rest during the day. Constant human interaction alters this natural behavior, reducing the time and quality of their rest.

While individual human interactions may seem harmless, the fact that they occur consistently, altering their ability to rest, has a cumulative impact which may be just as harmful as other more obvious threats. Whether dolphins "choose" to interact or not is irrelevant. The fact that human activity is negatively affecting their natural behavior is the real issue.

To reduce these negative impacts of human interactions on spinner dolphins, NOAA Fisheries is proposing to implement time-area closures in certain dolphin resting areas. Alternative solutions will also be considered.





Intro Continued

That is why we are here today: to get your comments on the proposed solutions to this issue, and to seek your input for use in creating an Environmental Impact Statement – a document that will explore the impacts not only to the dolphins, but also to other related human activities. We also want to find a solution that minimizes the impacts on all ocean users.

This is the beginning of the process. We don't have answers for every question – that is why we are seeking input from you. There will be opportunities to provide additional public comment later in the process. The packet you have been given includes all the information presented here tonight for you to consider.

Thank you in advance for your assistance.





Spinner Dolphin Status and Research



PIFSC

Marie Chapla
Cetacean Biologist
Pacific Islands Fisheries Science Center





Spinner Dolphin

(*Stenella longirostris*)

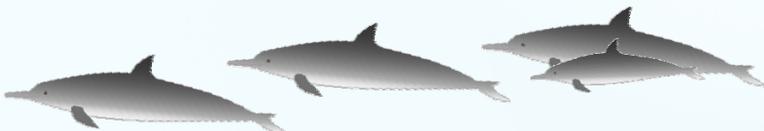
- A small dolphin that occurs in open ocean and coastal waters
- Length: 4.3 to 7 feet
- Weight: 100 to 165 pounds
- Long slender beak, dark grey dorsal cape, medium grey flanks and light grey/whitish belly.
- Specialize in foraging on small (<20cm) mesopelagic (mid-depth) fish, shrimp, and squid.
- Strong affinity to shallow bays for social activities, resting and predator avoidance during the day



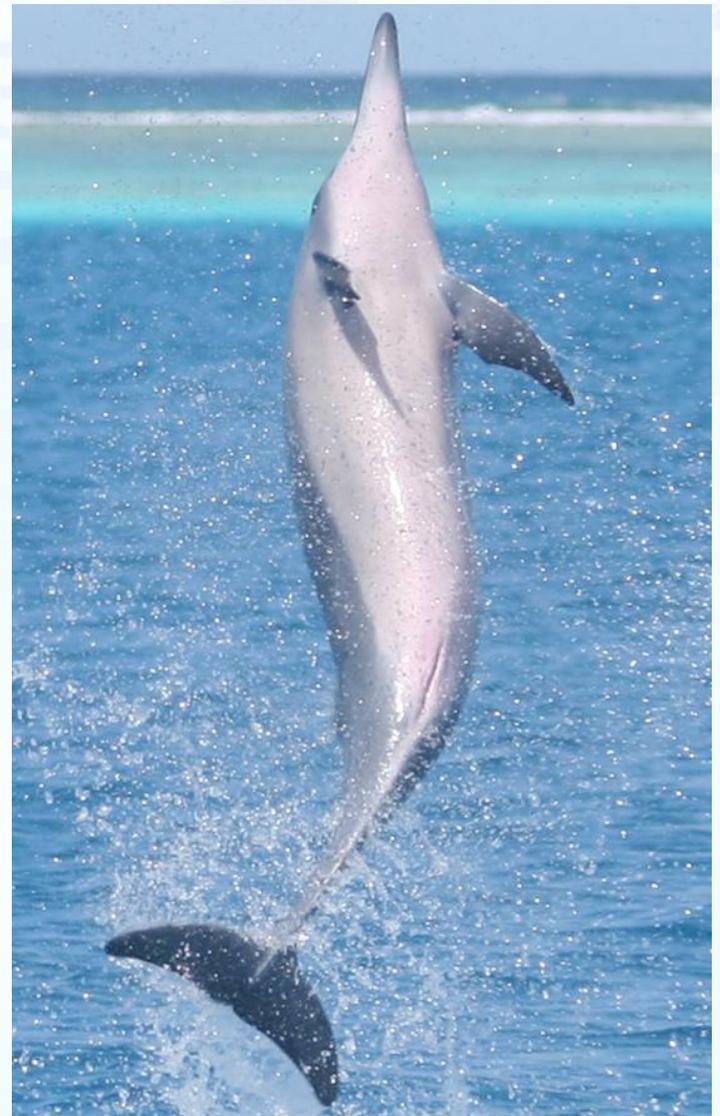


Spinner Dolphin Management and Population Status

- Common throughout HI archipelago
- Managed under Marine Mammal Protection Act as the Pacific stock
- Abundance Estimates
 - Approximately 3,300 in Hawaiian waters (Barlow, 2006)

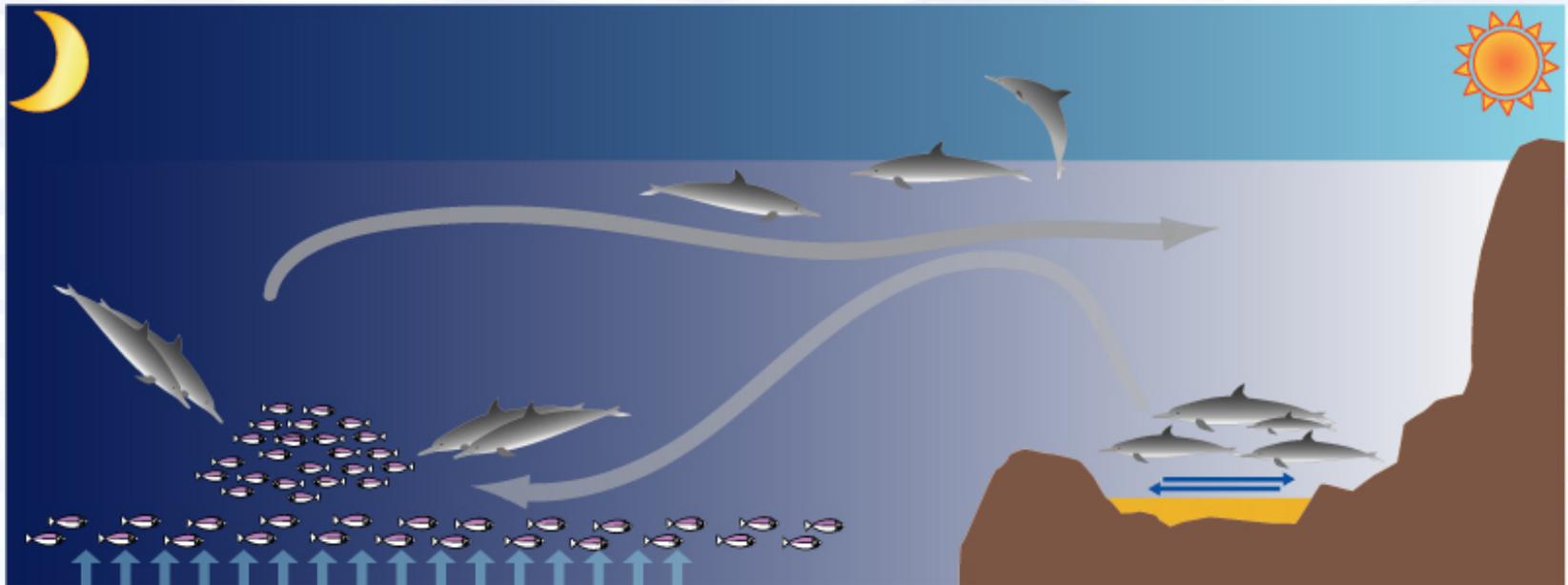


PIFSC





A Day in the Life of a Spinner Dolphin



- **At night - working the nightshift!**
 - Hunt offshore for fish, squid, and shrimp – 1-4 prey item per minute for 10+ hours.
- **During day** - use shallow coves and bays close to shore to:
 - Rest, socialize, care for young
 - Avoid predators (sharks)
- **Resting Behavior**
 - Reduced aerial behaviors (spinning and leaping)
 - Tighter synchronous swimming; slow back and forth swimming; longer dives
- **Transition between rest and hunting**
 - Movement out of resting areas, increased aerial behaviors





Spinner Dolphins and Human Interaction

- Rest delayed and compressed due to the presence of swimmers off Makua Beach, Oahu (Danil *et al.*, 2005)
- Resting dolphins easily disturbed by approaching swimmers and boats in Hulopoe Bay, Lanai (Driscoll-Lind and Östman-Lind, 1999) and Kealakekua Bay, Hawaii (Würsig, 1996)
- Likely that in some areas, humans would try to approach and interact with schools of spinner dolphins during most of their resting period (Driscoll-Lind and Östman-Lind, 1999; Courbis, 2004)
- Human interactions can consistently alter or interrupt dolphin behavior during resting periods.





Potential Effects of Human Interaction

- Shorter resting periods
 - You get home from work, you just want to relax but...
- Compromised foraging efficiency
- Reduced energy available for growth and reproduction
- Dispersing dolphins to areas where they may be more vulnerable to predators
- One example, there are more:
 - Significant decline in abundance where bottlenose dolphin watching tours increased from one to two operations per day (Bejder *et al.*, in press)





Implications for Hawaiian Spinners

- Spinner dolphins are an important ecological and cultural component of Hawaiian ecosystems
- Spinner dolphin behaviors can be altered by human interactions
- Similar interactions in other places reveal detrimental effects on dolphin populations
- Spinner dolphin behavior (clearly defined resting periods) may make them especially susceptible to these effects
- Precautionary approach to limit potential harmful human effects - act before we harm spinner dolphins in Hawaii (Johnston, 2006)





Current and Future Research

- Genetics
 - Help researchers at HIMB to determine stock structure within the Hawaiian archipelago
- Identify and characterize resting habitats
- Long-term photo-identification
 - Support genetics data
 - Individual habitat use
 - Large-scale movements (presence/absence)
 - Survival rates
 - Reproduction rates
 - Population estimates
- Study human-dolphin interactions





References

- Barlow, J. 2006. Cetacean abundance in Hawaiian waters estimated from a summer/fall survey in 2002. *Marine Mammal Science* 22(2):446-464
- Bejder, L., A. Samuels, H. Whitehead, N. Gales, J. Mann, R. Connor, M. Heithaus, J. Watson-Capps, C. Flaherty, and M. Krutzen. 2006. Decline in Relative Abundance of Bottlenose Dolphins Exposed to Long-Term Disturbance. *Conservation Biology*. doi: 10.1111/j.1523-1739.2006.00540.x
- Courbis, S.S. 2004. Behavior of Hawaiian spinner dolphins (*Stenella longirostris*) in response to vessels/swimmers. Masters Thesis, San Francisco State University. 209 pp.
- Danil, K., D. Maldini, and K. Marten. 2005. Patterns of use of Makua Beach, Oahu, Hawaii, by spinner dolphins (*Stenella longirostris*) and potential effects of swimmers on their behavior. *Aquatic Mammals* 31(4): 403-412
- Driscoll-Lind, A. and Östman-Lind, J. 1999. Harassment of Hawaiian spinner dolphins by the general public. *Marine Mammal Protection Association Bulletin* 17:8-9
- Johnston, D. W. 2006. A Hard Day's Night. Spinner dolphins also need their rest. *Ka Pili Kai* 28(2):9-11
- Norris, K.S., B. Würsig, R.S. Wells, M. Würsig, S. Brownlee, C. Johnson and J. Solow. 1994. *The Hawaiian Spinner Dolphin*. University of California Press, Berkeley
- Würsig, B. 1996. Swim-with-dolphin activities in nature: Weighing the pros and cons. *Whalewatcher* 30(1):11-15





The Rulemaking Process under the Marine Mammal Protection Act

Lisa Van Atta

MMPA Specialist

Protected Resources Division

NMFS Pacific Islands Regional Office





Current Guidelines for Viewing Spinner Dolphins

- View from a safe distance of at least 50 yards
- Refrain from trying to chase, closely approach, surround, swim with, or touch dolphins
- Guidelines for viewing marine wildlife in Hawaii are available at:
 - <http://www.nmfs.noaa.gov/pr/education/hawaii>





Marine Mammal Protection Act (MMPA)

- MMPA prohibits "take" of marine mammals (Section 3[13] of 16 USC 1361 *et seq.*)
- MMPA defines "take" as meaning "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal."





MMPA Continued

- As the agency responsible for management of marine mammals under the MMPA, NOAA Fisheries has further defined the term “take” to include:
 - “negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild” (50 CFR 216.3.)
- The term “harassment” is defined to mean “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.”





Advanced Notice of Proposed Rulemaking (ANPR)

- Published in the Federal Register December 12, 2005 (70 FR 237)
- Alerted the public that NOAA Fisheries is considering whether to implement management measures and/or regulations to protect wild spinner dolphins
- Comments were requested on six options





ANPR – Six Options

1. Make Hawaii's current marine mammal viewing guidelines into law
2. Make into law the current viewing guidelines with improvements
3. Establish minimum approach rule
4. Restrict individual activities of concern
5. Restrict vessel activities of concern
6. Establish time-area closures in resting bays





Responses to ANPR

- A total of 191 comments were received
- Written responses from 66 people
- Form letters from 125 people
- Numerous responses related to the six options
- New options were identified, including permits, increased enforcement, education and outreach, research, and monitoring and reporting





Community Outreach

- Stakeholder research in fall 2005
- Methods included interviews, site observations, participant observations, and a focus group
- Locations visited on Big Island, Maui, and Oahu
- Identified categories of access – motorized vessels, kayakers, beach-based swimmers, and other ocean users
- Multiple categories of stakeholders
- Multiple viewpoints and concerns are held by various stakeholder groups





The NEPA Process and the EIS

Jayne LeFors

NEPA Project Manager
Protected Resources Division
NMFS Pacific Islands Regional Office





Purpose of the National Environmental Policy Act (NEPA)

- Encourage harmony between humans and their environment
- Promote efforts that will prevent or eliminate damage to the environment
- Enrich understanding of ecological systems and natural resources





Requirements of NEPA

- Assess potential environmental impacts of proposed federal agency actions
- Consider environmental consequences early in decision-making to reduce, prevent, or eliminate environmental damage
- Seek out public comments on issues and alternatives to be addressed during scoping

NEPA DOES NOT: Dictate the decision to be made by NMFS.





What is included in an Environmental Impact Statement?

- Purpose of and need for proposed action
- Reasonable range of alternatives that meet project purpose and need
- Description of the affected environment
- Analysis of environmental consequences of alternatives

The Spinner Dolphin Human Interaction EIS will consist of an analysis of current and proposed management measures to protect wild Hawaiian spinner dolphins, and their effect on the human environment.





Environmental Factors Typically Considered in an EIS

- **Wildlife and Its Habitat**
 - Threatened & endangered species
 - Marine mammals & seabirds
 - Other marine & terrestrial species
- **Unique Geographic Areas**
 - National Marine Sanctuaries
 - National Wildlife Refuges
 - Designated Critical Habitat
 - Essential Fish Habitat
- **Socioeconomics**
 - Coastal and subsistence communities
 - Cultural & historical resources
 - Economic and social characteristics
- **Cumulative Impacts**
 - Past, present, reasonably foreseeable future
 - Short- & long-term
 - Direct & indirect





Need for the Proposed Action

There is a need to implement measures to minimize impacts of human-induced disturbance to wild Hawaiian spinner dolphins and to important habitat due to an increased frequency of and demand for human-dolphin interactions.





Purpose of the Proposed Action

To develop measures to protect wild spinner dolphins in the main Hawaiian Islands from human activities that may:

- result in their unauthorized taking;
 - diminish the value of their habitat used for resting; or
 - cause detrimental individual- or population-level impacts,
- while minimizing impacts on ocean users.





Proposed Action

To institute partial (time-area based) closures for certain specified spinner dolphin resting habitat in the main Hawaiian Islands.





Alternatives to the Proposed Action

1. Status Quo (No Action Alternative)
2. Minimum Distance Limits
3. Regulations on Types of Human Activity Allowed
4. Complete Closure of Spinner Dolphin Resting Habitat





1. Status Quo (No Action Alternative)

- Required by Federal Regulations (40 CFR 1502.14)
- No additional regulatory action to protect spinner dolphins
- Current “take” provisions of MMPA and implementing regulations would determine which human activities are unlawful





2. Minimum Distance Limits

- Minimum approach distances (similar to humpback whale rules [50 CFR 224.103(a)])
- Distances would accommodate reasonable level of dolphin viewing while minimizing potential negative impacts
- Approaching spinner dolphins within the minimum distance would be unlawful





3. Regulations on Types of Human Activity Allowed

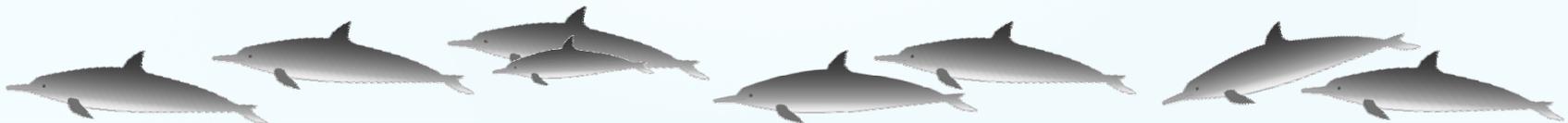
- Regulate human behavior while in NOAA Fisheries-identified dolphin resting areas
- Reiterate all activities currently prohibited under MMPA plus some additional (i.e., swimming with dolphins)
- Prohibit specific watercraft (e.g., kayaks, personal watercraft) as well as watercraft activity within dolphin resting areas





4. Complete Closure of Spinner Dolphin Resting Habitat

- Complete closure to all commercial and non-commercial activities within identified spinner dolphin resting habitat
- Exemptions in certain bays only for harbors transit and emergency situations





Major Environmental Issues to Be Addressed in the EIS

- Information needs for conservation of the species
- Locations, duration, and timing of closures
- Mitigation measures to reduce impacts of the proposed action on the human environment
- Cumulative impacts of human activities on spinner dolphins and the environment
- Economic and social impacts of proposed action and alternatives





Economic Analysis – The Regulatory Flexibility Act (RFA)

The RFA, enacted in September, 1980 (5 USC § 601), requires Federal agencies to:

- consider the impact of regulatory proposals on small entities (small businesses, not-for-profit organizations, and small governmental jurisdictions);
- analyze effective alternatives that minimize small entity impacts; and
- make their analysis available for public comment.





EIS/Rulemaking Schedule

Scoping Period	October 2-November 24, 2006
Scoping Comment Analysis	Fall 2006-Winter 2007
Draft EIS/Proposed Rule	Fall 2007
60-Day Public Comment Period/Public Hearings	Fall 2007-Winter 2008
Comment Analysis and Response	Fall 2007-Winter 2008
Final EIS	Winter/Spring 2008
30-Day Public Review	
Record of Decision and Final Rule	Spring/Summer 2008 (Rule effective 30 days after being published)





Additional Information

- **Contact:**
 - Lisa Van Atta (alecia.vanatta@noaa.gov); (808) 944-2257; or
 - Jayne LeFors (jayne.lefors@noaa.gov); (808) 944-2277; or
 - Dave Johnston (dave.johnston@noaa.gov); (808) 983-5398
- Available on NOAA Fisheries Pacific Islands Region web page
<http://swr.nmfs.noaa.gov/pir/fr.htm>
- Join the E-mail LISTSERVE on the following website:
http://listserver.afsc.noaa.gov/read/all_forums/subscribe?name=naianews
- To receive future copies of the Draft EIS, please register here and/or check availability on the website





Oral Comments



And a Few
Administrative
Issues





- Please sign in at the registration table
- You will have **a limited opportunity** to offer your oral comments
- This meeting is being recorded on audio tape and/or by a court reporter to ensure an accurate and complete record of your comments
- Tips for making comments
 - Keep comments targeted to issues within scope of proposed rule.
 - Avoid addressing different rules or policies in your comment.
 - Provide suggestions on management alternatives and issues to be addressed.





Written Comments

Your Options Are:

- Hand in prepared written comments to us tonight
- Use written comment sheets provided here and turn them in tonight
- Submit written comments for receipt by November 24, 2006 to:



Chris E. Yates
Assistant Regional Administrator for Protected Resources
Pacific Islands Regional Office, NMFS
1601 Kapiolani Blvd, Suite 1110
Honolulu, HI 96814
OR
Email: Spinner.Scoping@noaa.gov





5 Minute Break



**Collecting Questions
and
Sign-Up Sheets
for
Public Oral Comments**





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**Thank you for participating
in the
Spinner Dolphin Human
Interaction EIS
Scoping Process**

