

# **CONSERVATION ADVISORY SCIENCE NOTES**

No. 56

MANAGEMENT OF A SOLITARY, SOCIAL DOLPHIN SITUATION

# (Short Answers in Conservation Science)

This report is published by Head Office, Department of Conservation, and presents the results of scientific services or advice purchased from a consultant outside the Department or provided by Departmental scientific staff. All enquiries should be addressed to the CAS Coordinator, S&R Division.

Department of Conservation, P 0 Box 10-420, Wellington, New Zealand



ISSN 1171-9834

© 1994 Department of Conservation

Reference to material in this report should be cited thus:

Doak, W., 1994.

Management of a solitary, sociable dolphin situation. Conservation Advisory Science Notes No. 56, Department of Conservation, Wellington. 8p.

Commissioned by: Nelson/Marlborough Conservancy

Location: NZMS

### Management of a Solitary Sociable Dolphin Situation

by Wade Doak, Project Interlock.

## [I] Conclusions from the global History of Solitary Sociable Dolphins

The history; assembled by Project Interlock presents 41 cases in which dolphins, apart from their social groups, have lived in close proximity to humans. In many cases the relationship with humans has persisted for many years. In two cases: ten years and one of these, **Fungie**, persists at the time of writing\*.

At present, of the 41 cases in this report, ten are still in progress (although **Aihe**, in Golden Bay is doubtful).

In six cases, the dolphin was killed by human agency.

Several solitary dolphins may have died because of human mismanagement, in including two cases in New Zealand, where oil spillage or submarine explosion may have been involved.

Of the others, in two cases, bodies were found but cause of death could not be established. The rest just vanished. In no case has it ever been established that a solitary sociable dolphin has rejoined a social group of its own kind. From an analysis of the cases on record, it seems clear that the solitary situation is for the most part, permanent and that association with humans is important to the animal for tactile stimulation and social interaction.

## **Past Management Approaches**

For the most part the only formal management of solitary, sociable dolphin situations has been special protection status accorded to them by law. With **Pelorous Jack**, **Opo** and **Nina** special laws were passed by Parliament to accord them protection. These days most countries have an equivalent to our Marine Mammals Protection Act.

In a number of cases, the local community has erected notice boards and distributed pamphlets (examples appended) advising how the dolphin should be treated.

In the case of **Jojo** (Bahamas); **Fanny** and **Dolphy** (France), special guardians have been appointed by local institutions, to oversee the welfare of the dolphin and ensure that it is not maltreated by the public.

At Monkey Mia in Western Australia, a very special situation exists where several dolphins visit the beach and accept fish gifts from the public. Because such an accessible situation has produced an immense public response (up to 800 visitors in a

[ \* Nov. 1993]

weekend) two full time rangers have been appointed and they now supervise and restrict feeding. No swimming with the dolphins is permitted and no play objects (balls etc.) are permitted. Dogs are banned.

At a special centre on the beach, educational videos, pamphlets and advice are made available. This restrictive and rather static situation has developed because of the huge volume of tourism that has effected reciprocally a major growth of tourist facilities and global publicity.

With **Dolphy** at Colioure in South France, the guardian has taken special measures\* to prevent people holding her dorsal fin for rides, because he is convinced her fin is suffering physical damage from such attention.

With both **Dolphy** and **Fanny** near Marseille, the guardians are supervised by Professor Henri Augier, of the University at Marseille and in conjunction, in each case, with a local "friends of the dolphin" committee.

In the case of **Dolphy**, who has created an intensive situation reminiscent of the beach encounters of **Opo**, the local Mayor closely supervises and supports the guardian.

**Jojo** in the Bahamas is also closely managed by a guardian. A major problem there, has been curbing this male dolphin's aggressive sexual behaviours towards female tourists at the local Club Mediterranean.

In two cases there has been some controversy over the role of guardians who have been criticised by the public for becoming too possessive; over - solicitous and for demonstrating their own interaction with the dolphin to the public in the manner of a trainer at a dolphinarium. Facing with the problem of protecting a dolphin which is so easily accessible to the public in a beach situation, where no boats are needed, is extremely demanding and open to contention. Perhaps such problems might be tempered by the close support and supervision of a broadly based committee and some sound advice.

**Zero Three,** in Australia was managed informally for five years in a unique manner: all involved with the dolphin kept the situation a secret, while formal academic observations were maintained weekly along with playful human / dolphin interaction, in the midst of a major Australian city.

In the case of **Fungie** in Ireland, there is no formal management . Twelve small boats take the public to meet the dolphin, which has, in one year, generated over one million pounds in tourist income for the community. This situation is one of the longest on record. This mature male dolphin has become very selective about permitting physical

[\* cell phone to police]

3. contact, allowing it with only those with whom it has established trust. For the most part it will only approach tourists when they visit en masse provided they are holding a tow-line. If they release it and swim towards the dolphin, Fungie leaves. But he has close, intimate sessions at special times with a circle of long term human friends.

Fungie is a rare case of a male solo dolphin that does not behave sexually towards humans, although he has been seen copulating with visiting dolphins. Sexual aggression can become a problem with solitary male dolphins and to a lesser extent, with females. Joca in Montenegro has physically assaulted women swimmers who intervened when she was interacting with special male human friends. This could become a problem as Maui matures sexually and enters estrous.

4.

#### [II] The "Maui" Situation

**During the period in which Maui** has been interacting with the public, she has made several major changes in her activity patterns and range of movement.

- [1] The Motonau period.
- [2] The Kaikoura Peninsula period.
- [3] The Goose Bay period, when she avoided Kaikoura Peninsula.
- [4] The return to Kaikoura Peninsula and ranging further north.

Conclusions: Her activity and home range are subject to change and this can be expected to continue to alter whereas Fungie and Jean-Louis (a female Tursiops) have been extremely static in their activity and home range over a long term. Other solitary sociable dolphins have ranged widely: Donald set up a series of home bases at small harbours along the Welsh and Cornish coast over a seven year period. Fanny has moved her home base several times in the port environs of Marseille; Jojo ranges widely and often mixes with dolphins in social groups, etc.

Many factors could interplay to cause a dolphin to shift base: variations in food supply; fear of orca or shark predation; seasonal changes in access to human interaction etc.

**Conclusion:** it should not be assumed that any current situation is a sound basis for planning.

5.

## **Management Options With Maui**

- [1] Laissez faire approach: leave her alone, in the hope that she will not become involved with humans and will return to her own society.
- [2] Appoint a guardian to supervise the situation. Devise a set of guidelines and rules to ensure her welfare which the guardian would implement.
- [3] Set up a committee to supervise and regulate the situation, with appropriate notice boards, pamphlets and public education as to appropriate etiquette, perhaps incorporating guardianship.

#### [IV] Matters for Consideration

- [1] Buoyed areas for interaction, as outlined earlier.
- [2] "No go" area for the dolphin's rest periods, if deemed necessary.
- [3] Restriction on the number of swimmers that can approach her.
- [4] Restriction on the number of boats that can approach her.
- [5] Restriction of the types of boats that may take the public to visit her.
- [6] Dolphin etiquette: areas of her body that are "no touch" zones. See pamphlets appended.
- [7] Ban on offering the dolphin food gifts.

#### **Discussion of the Above**

- [1] This may be practicable in situations that may arise, such as developed at Goose Bay. In more plastic, wide-ranging situations, it may be irrelevant.
- [2] Observations of **Maui's** behaviour is needed, along with an understanding of how to recognise her resting behaviour: a pattern of regular breathing along with circling a buoy on the surface, or regular patterned submergences. To many people a resting dolphin would seem quite active and 'normal'. Rest periods can be intermittent and occasioned by factors such as the tide rather than at a regular time each day.

In the case of **Jean-Louis**, who was usually wary of body contact and managed to survive intensive public attention ( divers, swimmers, kayakists ) for ten years, she had an adjacent refuge area: a rocky reef where she could elude persistent swimmers in turbulent white water, returning later to the rocky cove where she interacted with people.

[3] If too many swimmers approach a solitary dolphin it may become frustrated by the "cocktail party" effect: relationships are interrupted just as they are developing: play routines; trust bonds; delicate reciprocal understandings. There have been many cases overseas where the dolphin has shown frustration and even aggressiveness in such circumstances. People should realise that it is just as delightful to be a spectator of wild dolphin / human relationships as to participate. In this case more exciting and complex developments will be observed in a 1:1 situation.

With a maximum of four people in the water, the dolphin will usually interact with only one person at a time, but not feel over-pressed.

[4] Similarly, a better situation will arise with only one boat present. The more boat

7.

traffic the more the dolphin becomes distracted, rushing from propeller to propeller to enjoy the tactile stimulation of prop. wash or the challenge of a bow ride at speed. It would be ideal to limit boat numbers, if and where practicable.

However, it needs to be borne firmly in mind that managing a human / dolphin situation is an exercise in diplomacy: if rules and regulations are not compatible with the needs of other sea-users, resentments could be aroused that could endanger the dolphin. It is most important to consult all sea users and seek their advice, involving them in the decision-making. (No management at all would be better than a bullet riddled carcass...)

- [5] For commercial purposes, jet-propelled boats would be ideal, providing safety for both dolphin and public while giving the dolphin the maximum in tactile stimulus.
- [6] Dolphin etiquette and "no touch" zones: a survey of the pamphlets appended would provide a consensus on what has been developed elsewhere. It is generally agreed that the blow hole and eyes and genital zones should be avoided. It may be considered worthwhile to avoid fin tows, but then again, this may not be a problem in the off-beach encounter situation where **Maui** has adequate control. When freely swimming she can readily dislodge an unwelcome fin tow and avoid grasping hands. She seems to enjoy the fin-tow game and it may be no problem if not excessive.

Decisions such as this need careful consideration and review by an on-the-spot committee, along with advice from an experienced source.

[7] It is universally agreed that it is not wise to proffer food to a solo dolphin for several reasons: there are ecological implications, dangers of malevolent poisoning; inappropriate food items etc.

#### **Medical Assistance**

For those who may counsel a laissez - faire or "hands off" approach it should be realised that in many solo dolphin cases, it has been necessary for humans to render medical assistance: to remove fish hooks and entanglements; to administer antibiotics following injury; to rescue from stranding etc. In such situations it has been the trust and acceptance of human touch that has made it possible to render assistance. A solitary dolphin has only human agency to count on in a crisis. To deny this cannot be in its best interest.

- Detailed accounts in the book: **Encounters with Whales & Dolphins''**, Wade Doak, Hodder & Stoughton Ltd 1988.
- Further academic description: **The Bottlenose Dolphin,** Edited by Stephen Leatherwood Academic Press, N.Y. 1990.
- -Chapter 18 Christina Lockyer: **Review of Incidents Involving Wild, Sociable Dolphins, Worldwide.**

### **Supplement Management Suggestions for Boat Owners**

- [1] Maui is a propeller addict: for her it probably provides the tactile stimulation she lacks as a solitary but highly sociable mammal. While boat owners can do little to prevent her following closely behind their stern, they should be made aware that dolphins are not infallible and can injure themselves on propellers.

  Accordingly, boat owners should avoid any sudden changes in speed or direction while Maui is close to their propeller. She also hovers close to the propellers of stationary boats and rubs on the rudder.
- [2] Owners of all vessels should be aware that a dolphin could be fatally affected by any release of fuel oil or diesel, oily bilge water etc. The dolphin's blowhole operates at the very surface of the sea. Inhalation of oily substances can produce an irreversible and terminal deterioration of the lungs.
- [3] Conflicts can arise between boat owners for the attention of **Maui.** In situations where she is involved with people in the water adjacent to an anchored boat any passing vessel can usually entice her to pursue which may be seen as effectively "stealing" her. Such conflicts at peak holiday periods could endanger the dolphin and in past solo dolphin situations have led to confused, erratic behaviour and ill-health arising from stress.

Boat owners should be urged to act judiciously and with good manners: where people are engaged with Maui in the water, rather than entice her away, other boats could at least approach quietly and drop anchor so their occupants can observe the interaction from a reasonable distance and watch the in-water proceedings for half an hour before entering the water\*. At which point, if the numbers around Maui exceed four, it would be good manners for the earlier group to withdraw from the water and observe, perhaps having another turn later if the games persist. In sensibly resolving potential human conflict with etiquette, boat owners can avoid causing stress to Maui which few people would intentionally wish to inflict on a dolphin.

[\* Especially relevant to the potential buoyed off encounter area proposal.]

Wade Doak, P.O. Box 20, WHANGAREI