



# **Social perspectives on human-shorebird interactions and strategies for reducing negative impacts**

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## Introduction

Human-wildlife interactions in shoreline areas, such as the North Shore of the lower Maroochy River, can have a negative impact on shoreline biodiversity. According to records from the Queensland Wader Study Group, until 2012, the Maroochy North Shore spit was the most important roost area for shorebirds in the lower Maroochy River catchment. However, in recent years, disturbances from the North Shore dog off-leash area have become too great, and birds no longer roost on the North Shore spit.

To address these and other impacts, the Sunshine Coast Council is collaborating with researchers from the University of Queensland to develop management strategies that can help reconcile recreation and the conservation of important environmental values in the North Shore area. To inform the development of these strategies, a community survey was conducted to better understand:



*Figure 1 North Shore Area*

- Who visits the North Shore area (including demographics, visitation patterns, values, and attitudes)?
- What are the most common types of recreational activities in the area?
- What factors influence visits and desired visit outcomes?
- What are visitors' perceptions of different strategies to reduce human (including domestic dog) impacts in the area?

## Who participated in the study?

A total of 2076 individuals participated in the survey, with 1898 completing the online survey and 179 participating in the in-person interview at the North Shore. Overall, more females participated in the study (55% for the in-person survey and 69% for the online survey). As anticipated, most responses were from postcodes closest to the area, with nearly 50% of respondents residing in the 4564, 4560, and 4556 postcodes. In terms of suburbs, the largest proportion of online survey responses came from nearby suburbs, including Bli Bli, Buderim, Twin Waters, and Mudjimba.

## How often do respondents visit the North Shore, and why?

The primary reason for most respondents' visits was to walk their dogs, with 84% of in-person interview respondents and 78% of online survey respondents indicating this activity. Other, less frequently mentioned, activities included bringing their children to the beach, relaxing on the beach, swimming, and enjoying nature. Across both the online survey and in-person interviews, over 50% of respondents



*Figure 2 UQ Researchers at North Shore*

reported visiting the North Shore area at least once per week.

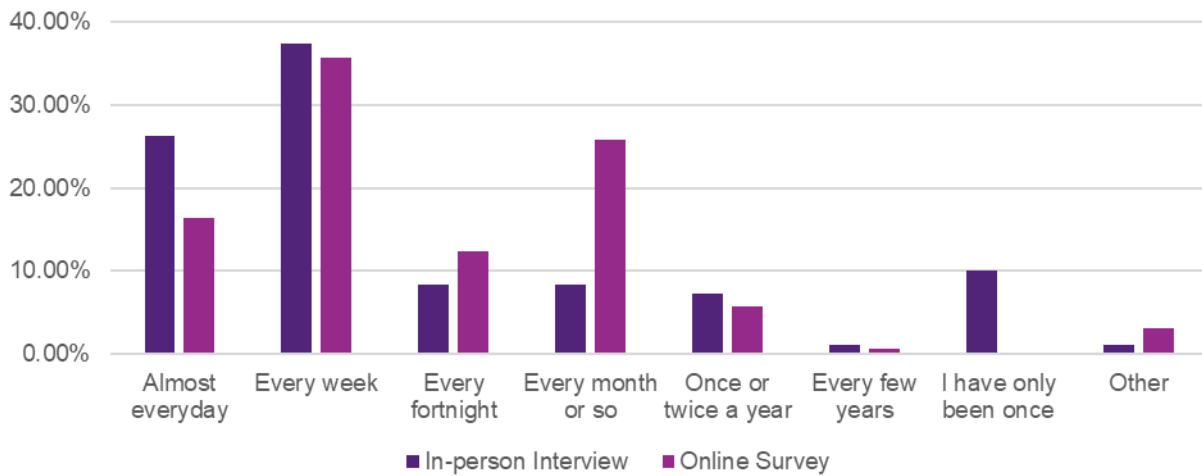


Figure 3 “How often do you visit the North Shore area?” (% of total response; N = 1941)

## Visitor perceptions, values, and attitudes

### What do respondents value about the North Shore?

Nearly 3 out of 5 respondents mentioned that the area is a dog off-leash area. Specifically, respondents highlighted that it is important for their dogs to have access to a large area with water (calm water and/or surf) and the ability to socialise with other dogs.

Many respondents emphasised the importance of access to recreation and exercise, with several mentioning the 'loop' trail that allows visitors to walk a circuit from the river to the ocean through the bush. Additionally, respondents appreciated the natural and 'undisturbed' character of the area, as well as its quiet and relaxing ambiance.

## What problems do respondents perceive for the North Shore area?

While a large proportion of the respondents indicated that they felt there were no problems or issues, for the online survey, **the top three responses were: a lack of parking, erosion, followed by a lack of dog poo bags in the dispensers**. For the **in-person interviews**, however, the responses were slightly different<sup>1</sup>. While the top issue was still a **lack of parking, dog poo, both in bags and not in bags**, were the other top ranked issues.

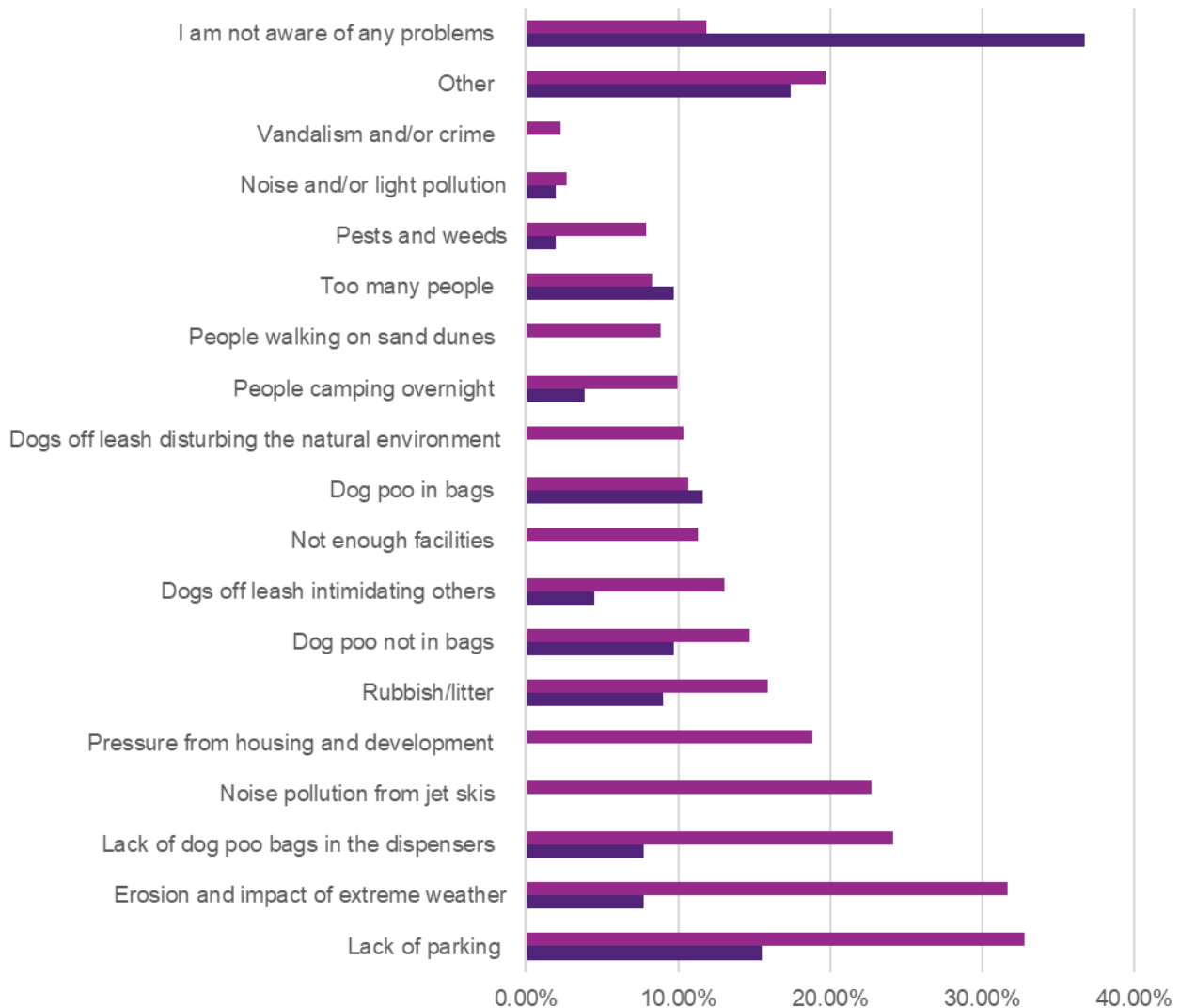


Figure 4 "What do you think are the top three problems or issues that need to be dealt with on the North Shore area?" (% of total response; N = 1941)

<sup>1</sup> Unlike the online survey, participants of the in-person interview were unable to read the list of response options. This will have influenced the results. If prompted, as with the online survey, there is a high likelihood that the proportions for the issues listed in the interview would be significantly different and likely much higher.

## Visitors' perceptions on strategies to reduce human impacts on the North Shore

### Are respondents aware that the North Shore area is home to shorebirds?

The survey revealed significant differences between the two groups. In the in-person interviews, just over half of the respondents were unaware of the shorebirds, while in the online survey, only 1 in 10 were unaware.

### How did respondents react to information provided about shorebirds?

Respondents were given brief information about shorebirds. Online respondents were then asked to rate its newness, interest, and importance on a scale from 1 to 10. Over 85% of online respondents found the information interesting and important, but only around 50% found it new. When in person respondents asked for their thoughts, some respondents expressed support for potential restrictions to protect shorebirds, while others were concerned about the impact on dog access. Other common themes included disputing the negative impact of dogs on shorebirds and a lack of awareness about shorebirds in the area.

*Many of the shorebirds that visit the area are endangered. The Maroochy North Shore used to be the most important roost area for shorebirds in the lower Maroochy River. Human activities, including dogs, can interfere with their breeding, roosting and feeding, which is contributing to a decline in shorebird numbers. In particular, the dogs can disturb the shorebirds during their feeding or roosting, which is a problem because the birds have a very narrow feeding time.*

### Do respondents support or oppose strategies to reduce human impacts?

First, respondents were asked for their top-of-mind suggestions to protect migratory shorebirds, and many suggested restricting access to dogs. This was the most common suggestion, with nearly three-quarters of in-person responses and two-thirds of survey responses mentioning it. However, most of these suggestions were specific to restricting access to certain areas or times when birds are present, rather than advocating for a full beach closure.

Next, respondents were asked to rate their support for several strategies to reduce human impacts on the North Shore area (Table 1). Strategies that did not involve restrictions, such as extending the off-leash area on the surf side, providing new off-leash sites, and adding more bins, received strong support overall. In-person respondents also strongly supported the provision of additional signage. However, support decreased for strategies that did involve access restrictions, such as restricting dog access from a portion of the inshore beach during certain months. Only around one-third of online respondents supported these types of strategies, and support was generally higher among in-person respondents. For example, two-thirds of in-person respondents indicated support for seasonal restrictions.

*Table 1 "To what extent would you support or oppose the following strategies to reduce impacts on shorebirds for their protection"*

	In-person Interview (N = 178)		Online Survey (N = 1612)	
	M	SD	M	SD
Restrict dogs being off-leash from a portion of the inshore beach during the months of September to April	6.98	4.17	5.04	4.14
Restrict dog access from a portion of the inshore beach during the months of September to April	6.23	4.55	4.11	4.15
Restrict dog access from a portion of the inshore beach all year around	3.11	4.20	2.79	3.91
Extend off-leash area on the surf side of the beach	7.89	3.93	6.62	3.93
Provide new off-leash sites in other beach areas close by	8.06	3.74	6.63	3.90
Provide new off-leash sites in other non-beach areas close by	6.82	4.38	5.78	4.14
Create more signage that encourages people to take dogs off leash on the surf side only	7.74	3.96	5.59	3.99
Place more bins	8.14	3.68	7.76	3.07
Place more dog poo bag dispensers	7.68	4.01	7.69	3.18

*Note: M = Mean, SD = Standard Deviation. Responses were scored on a scale from 1 = Do not support to 10 = Highly support.*

### Which factors are related to support for strategies?

This section explores whether support for different strategies varied according to demographics, location, patterns of visitation, values and/or awareness of the shorebirds. Generally,

- Men were generally more supportive of restricting access whereas women were more supportive of the other non-restriction related strategies.
- Older respondents were more supportive of restricting access whereas younger respondents were more supportive of the other non-restriction related strategies.
- As would be expected, people that visit the area to walk their dogs were less supportive of the strategies that involve restricting access compared to non-dog owners and/or people that visit the area for other reasons.
- Those that visit the beach more frequently were less supportive of strategies that involve restrictions to access.
- People that live closer to the beach (i.e., less than 10 minutes' drive) were more supportive of strategies that involve restricting access compared to those that live further away. This was especially true for residents of Twin Waters, who tended to be more supportive of restrictions. The



lowest scores in terms of support were generally from residents of Buderim and non-residents of the SCC.

- While prior awareness of the shorebirds did not influence the degree to which they supported the different strategies, how people responded to the information provided during the survey did influence support. Those that had a positive response to the information (i.e., those that found it interesting and important) tended to be more supportive of the strategies presented (i.e., restricting access, providing new off-leash sites at other beaches and more signage).

## Summary of findings

**Visitors to the North Shore area cherish it for its natural beauty and recreational opportunities, often with their dogs and families.**

Many of the respondents highlighted the area's off-leash dog beach as a valuable feature. Respondents pointed out that the large, open space allowed their dogs to socialize, exercise and access the water. Other popular features included the "loop", the undeveloped and natural environment, and the unique access to both calm water and surf.

**While some respondents were unaware of any issues, most acknowledged the various human impacts on the area.**

Lack of parking was the top issue raised by both online and in-person participants. Other commonly reported issues were erosion and the presence of dog poo, with many respondents also noting the shortage of dog poo bags.

**Although awareness of shorebirds varied across the samples, most participants found the provided information important and interesting.**

**People are open to a range of solutions to reduce impacts on shorebirds, but express a preference for solutions that preserve access to adequate off-leash areas.**

Visitors to the North Shore were generally supportive of extending the off-leash area on the surf side and providing more off-leash sites nearby, as well as the placement of more bins and dog poo bag dispensers. However, there was less support for strategies that involved creating new off-leash sites outside the beach or more signage to encourage people to use the surf side only.

Overall, visitors were less supportive of any strategy that would restrict dog access all year round. In-person participants were generally supportive of partial restrictions during September to April, whereas the online respondents were more divided.

In general, visitors to the North Shore highly value the area, particularly for its off-leash dog access. There is consistent and widespread support for strategies that don't limit access to the beach, such as expanding the off-leash area on the surf side and creating new off-leash sites, especially on other beaches. Respondents also expressed support for more bins and dog poo bag dispensers to address common issues like litter and dog waste.

While there is some support for partial restrictions on sections of the North Shore area during September to April, this support is moderate. To gain wider acceptance for restrictions, it's essential to not only raise awareness about shorebirds but also educate the community about the impact of dogs on shorebirds as many respondents were unaware of these impacts.

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