

Wash-up Survey Summary

As part of FRDC Project 2019/075, researchers from the Institute for Marine and Antarctic Studies (IMAS) conducted a wrap-up phone survey of recreational rock lobster fishers in April and May 2021. The wrap-up survey was designed to collect information to complement the initial and diary surveys conducted earlier in the 2020/21 season.

In the wrap-up survey, respondents were asked a series of questions related to their experience fishing for rock lobster in Victoria, catch and effort in the 2020/21 season, satisfaction with the quality of fishing in the 2020/21 season, perspectives on proposed changes to reporting policies and the VicRLTag catch reporting app, and participation in the tagging program. Survey participants had participated in the diary survey when they were randomly selected using geographically stratified representation to cover the spread of fishers in each Australian Bureau of Statistics (ABS) Statistical Area Level 4 (SA4) classifications across Victoria. The sample was further split, due to the high number of registered fishers who do not report catch in a season, to increase the proportion of fishers who reported catch in the previous season. Of the 270 participants who completed the diary survey, 263 were available for the wash-up survey. The wash-up survey had 96.6% full response rate, while 1.9% could not be contacted and were considered sample loss.

Catch Per Unit Effort (2020/21 Season)

Slightly less than half (45%) of the diarists who fished for lobster indicated they were either quite or very satisfied with the actual catch rates (average number of lobster caught per fishing trip) they achieved during the diary period (Figure 1). Most diarists (54%) were not very or not at all satisfied with their catch rates. In relation to successful fishing trips (i.e., trips with at least one lobster caught), most respondents (52%) indicated that the proportion was about the same during the 2020/21 season when compared with the previous season, 43% suggested that success rates had declined and only 5% indicated that their success rates had increased (Figure 1).

Since the recreational lobster fishery is highly consumptive, fisher satisfaction is expected to be strongly correlated to harvest rate. To test this assumption, catch rates expressed as the total number of lobsters kept divided by the total number of days fished in the diary survey were calculated for each diarist and then matched to their response to the catch-rate satisfaction question. Overall, fishers were generally satisfied (very or quite) with catch rates averaging over one lobster per day, whereas fishers expressed dissatisfaction with catch rates of below 0.5 lobster per day (Figure 1).

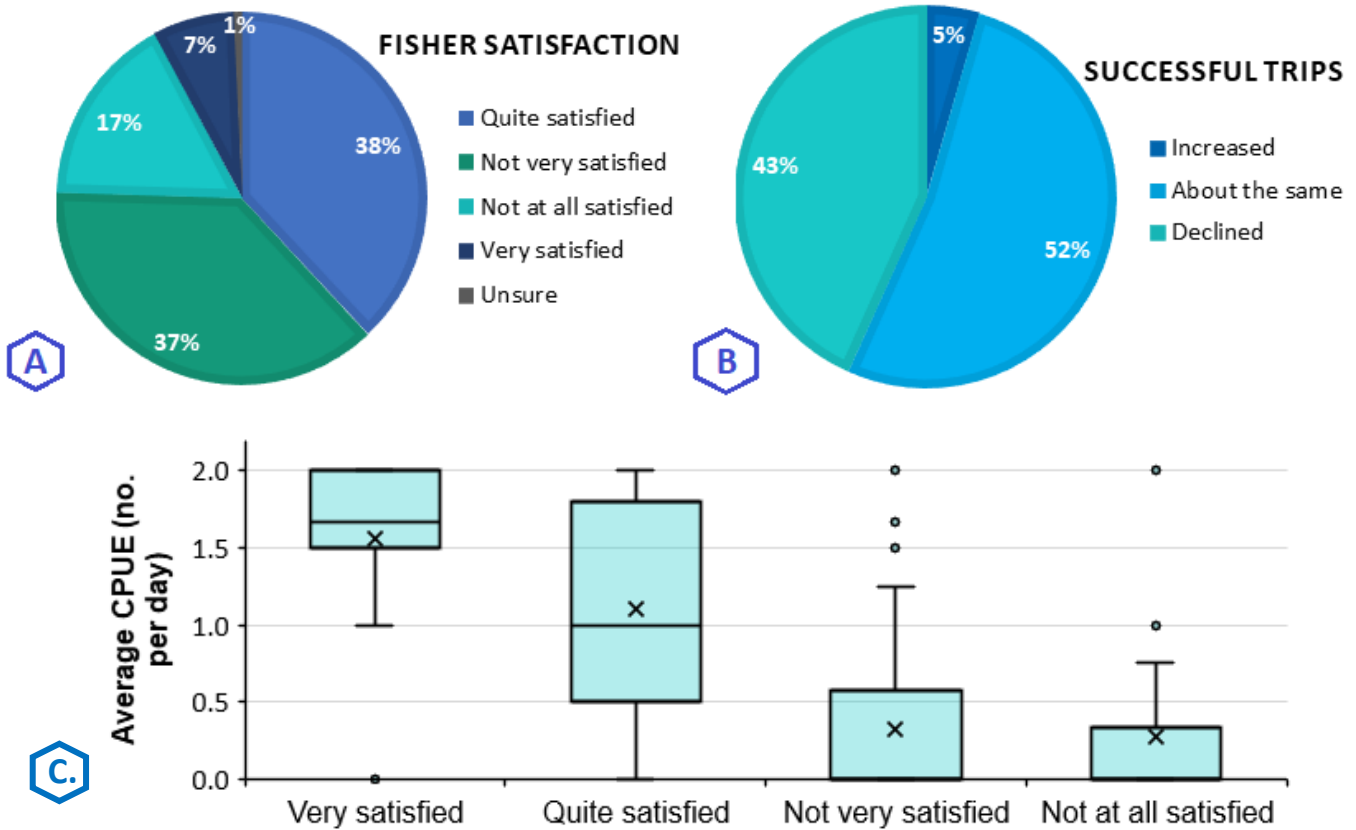


Figure 1: Fisher satisfaction with CPUE rates in the 2020/21 season (A), the proportion of successful trips in the 2020/21 season compared to previous seasons (B) and the catch per unit effort (CPUE) from diary survey and the corresponding fisher satisfaction in the wash-up survey.

Proposed Recreational Rock Lobster Tagging Program Revisions

Respondents were informed that the timing of when catch reports need to be submitted was under consideration and that the VFA was seeking feedback about preferences for reporting of catches. The highest proportion of respondents supported reporting of catches within 24 hours of capture (63%) (Figure 2). Reporting prior to leaving the place of catch landing and within 48 hours both had the least support from respondents (26.8%). Cumulative support, that is based on the least duration from time of capture that an individual respondent indicated support, suggested that 95% of respondents supported reporting catches within at least 24 hours of capture.

Respondents were informed that another component of the new reporting system will be a voluntary option to provide additional fishing information, such as location fished, methods used, time spent fishing, weight and sex of any lobster caught, comparable to the “citizen science” option in the current tag reporting app. Respondents were presented with a number of incentives and asked which, if any, they thought would make this additional reporting option appealing enough to consider signing up for it in the future. Regular updates on fishery-wide catch and effort information attracted support from the greatest number of respondents (73%), emphasising the importance of two-

way communication and feedback to fishers and highlighting the importance and benefits of the data being provided (Figure 2).

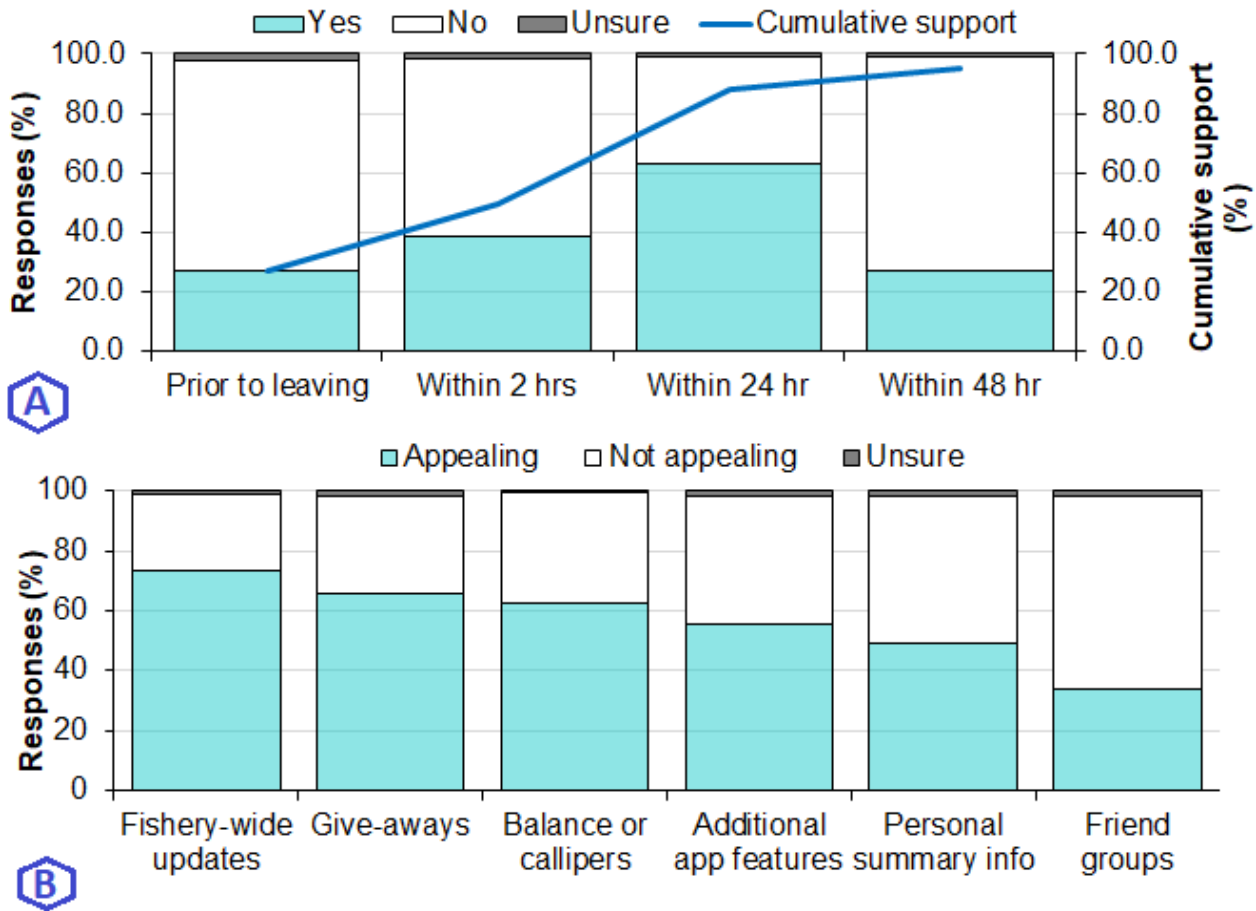


Figure 2: The fisher support for different reporting timeframes under consideration for the revised Victorian Rock Lobster Reporting Program (A), and the fisher support for different incentives that could be included in the revised Victorian Rock Lobster Reporting Program to increase participation and reporting rates (B).

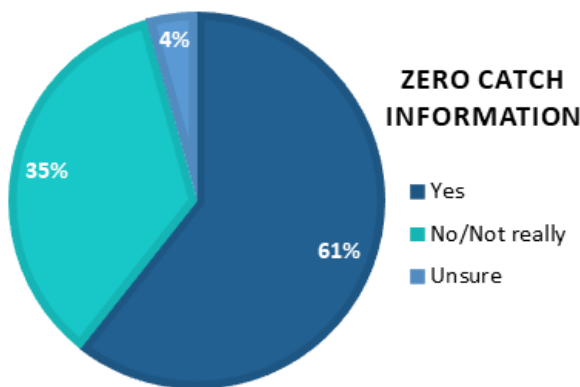


Figure 3: The participant responses on the value of collecting information on zero catch fishing trips for the management of the Victorian recreational rock lobster

Respondents were reminded that the current tag system requires fishers to only report on trips that result in a catch. However, including all trips, regardless of whether lobster are caught, has potential to provide a more complete picture of fishing activity and fishing success rates, as well as providing an indicator of rock lobster abundance (Figure 3). While most respondents (61%) were of the opinion that information on zero catch fishing trips was valuable for managing the Victorian recreational rock lobster fishery, only a minority (14%) were supportive of mandatory reporting of zero catch fishing trips. Most respondents (85%) were, however, supportive of voluntary reporting of zero catch fishing trips.

Fisher Abundance Index

Diarists who had fished for lobster during the survey period were asked to rate the relative abundance of rock lobster in 2020/21 compared with previous seasons (Figure 4). Only 10% of respondents reported observing increased abundances of legal sized lobster in 2020/21, this compared with 28% who reported an increase in the abundance of undersized lobster. By contrast, 34% of respondents reported a decline in legal sized abundance while 26% observed a decline in undersized abundance. There was no difference in the proportion of respondents (42-43%) who suggested that legal or undersized abundances was about the same in 2020/21 as in previous seasons (Figure 4).

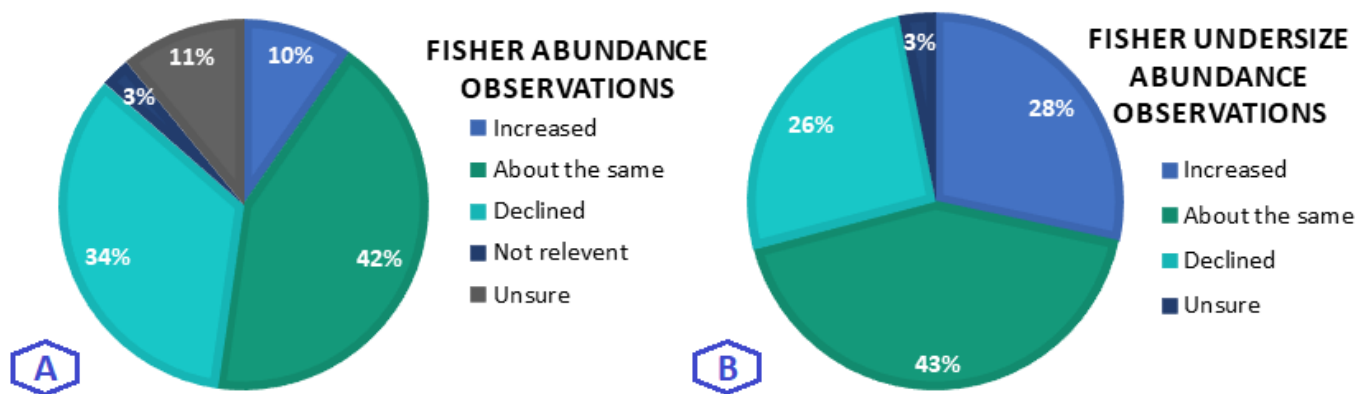


Figure 4: The abundance of rock lobster in the 2020/21 season compared with previous seasons based on fisher observations (A), and the abundance of undersize rock lobster in the 2020/21 season compared with previous seasons based on fisher observations (B).

More Information

The full report will be available on the FRDC website at the URL:

<https://www.frdc.com.au/project/2019-075>.