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Research Article

The Effects of Depth and Habitats on Bycatch Distribution in Deployed Fish Traps in Bidong Archipelago, Terengganu – Peninsular Malaysia

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Abstract

In many marine ecosystems, the fish population has been correlated to bycatch related activities, the most frequently fisheries activities in Malaysia, while the relative importance of other factors such as the depth of artisanal fish trap remains understudied. We investigate whether the bycatch distribution would be affected by deployment of artisanal fish trap at different depths, placed at extensively studied marine educational university station, the Bidong Island, East Coast of Peninsular Malaysia, Terengganu. The traditional artisanal fish trap with a dimension of 1.52 m x 0.92 m x 0.92 m with the wooden frame and the oval shape funnel with a diameter of 25 cm x 6 cm and 25 cm of entrance depth were used for sample collection. The results show that there are six families, six genera and seven species of fish were successfully captured with a 20 m depth captured more fish species compared to others (i.e., 10 m and 15 m depth). The findings of this study provide evidence of the relationship of fish trap depths and fish distribution in the wild. This information could be useful for fishermen for further deployment of their fish trap within the sampling areas in the future.

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1. Introduction

Fish traps deployed by professional and artisanal fishers can be of various shapes and designs depending on the fished area, environmental conditions, and targeted species (Munro, 1983; Collins, 1990; Vadziutsina and Riera, 2020). Fish traps have been used in the Malay Archipelago since prehistoric times (Indrahti and Maziyah, 2021). However, other fisheries technologies that have arisen recently (e.g., GPS, echosounder, sonar, and remote sensing) have created improvements resulting in significantly increased fishing productivity and supported fishermen in achieving greater financial profits (Hajisamae *et al*., 2015; Azahari *et al*., 2020). Can these recent technologies be used to improve trap fishing? Water depth is one parameter affecting the species composition of various demersal reef species (e.g., Travers *et al*., 2006), so depth of fishing trap deployment may be a variable fishers might employ to manipulate their catch composition.

Due to historical patterns of fisheries develop-ment, limitations using other gear or limits placed on using it, fish traps frequently serve as the primary fish-ing equipment in some regions, specifically those with reef habitats (Chen *et al*., 2012; Vadziutsina and Riera, 2020). Demersal fish stocks are mostly exploited with artisanal fish traps. The trap consists diverse of designs to target high-value species such as bony fishes, cephalopods and crustaceans (Vasconcelos *et al*., 2019; Azahari *et al*., 2020; Patanasatienkul *et al*., 2020; Naimullah *et al*., 2022). Besides, the Serranidae, Lutjanidae, and Sparidae families of fish as well as other higher trophic level fish species are frequently the targets of trap fisheries (predators and migratory invertebrate feeders) (Vadziutsina and Riera, 2021).

In places with overfishing, there is a tendency for the proportion of these high trophic level species to decline, followed by their displacement with other fish species from lower trophic levels that were once thought to be bycatch but are now valuable. A few extremely valuable fish species are also commercially extinct and very infrequently captured (Vadziutsina and Riera, 2021). Bycatch refers to fish and other marine life that are accidentally caught and may or may not be discarded, whereas "discards" refers to fish and other marine species that are discarded (Zeller *et al*., 2017). Unwanted species are included in discards, along with valuable target and non-target species that cannot be retained for ethical or legal purposes. Based on WWF (2021), sharks, coral fish, and juvenile fish are among the astounding wide range of marine life that is dragged up with the catch and then dumped overboard when it is dying or has died. The study by Stevens (2021) observed that trap fishing has potentially caused bycatch on both target and non-target species, including non-captured species, either through indirect or direct impacts .

Since effective regulation has kept harvested fish species resilient in some trap fisheries and, in some cases, prevented overfishing, the collapse of fish stocks in other areas has led to a total restructuring of local fish communities and ecosystem deterioration in general (Hawkins and Roberts, 2004; Marshak *et al*., 2007). Many fish stocks are currently experiencing levels of fishing mortality above the threshold at maximum sustainable output (Tuda *et al*., 2016 ; Colloca *et al*., 2017). Overfishing has caused a decrease in fish species' population and biomass regardless of their commercial value and the targeted removal of larger fish individuals from all trappable species. Whilst "target species" are those that produce the greatest economic output,artisanal fisheries have a variety of catch management practices, and the definitions of "by-product," "by-catch," and "discarded" species may vary depending on the site and context (Jones *et al*., 2018).

Often, under-reporting or non-reporting of discard rates can further threaten endangered and protected marine species and have potentially detrimental effects on the fisheries themselves. The terms 'bycatch' and 'discards' are defined differently by various authors, entities, and authorities, yet these definitions are frequently irrational and conflicting (Alverson *et al*.,1994). 'By-catch' is generally defined as fish or other animals that were accidentally caught by fishing gear or vessels, as well as catch-related deaths of marine ani mals (NOAA Fisheries, 2022). 'Discards,' on the other hand, are fish that are intentionally returned to the water after being captured and landed onto the boat due to regulatory restrictions, their relatively low value in comparison to other species in the catch, or other factors that render them as nontarget species (Graham, 2010). Depending on circumstances, targeted species, and by-catch species may both be discarded and under certain legal and market limitations, some bycatch may be kept and landed while the majority is discarded along with some target species (He, 2015). Furthermore, if the fish are still alive when fishers accidentally catch these unwanted species, they could be killed as they discard the catch. Fish traps may be a source of live fish, but the captured fish may become bycatch if they are trapped frequently, suffer harm from stress, and eventually die. Marine fish populations may be significantly affected by this approach of discarding bycatch (Shester and Micheli,2011; Bacheler *et al*., 2013 ; Gray and Kennelly, 2018).

With a goal of reducing bycatch in Malaysian fisheries, there are few studies conducted in Malaysia using artisanal fish traps to analyze fish composition based on depth, habitat, size and composition of bycatch species. This research purpose is to investigate the effect of different depth of deployment artisanal fish traps on percentage of bycatch in the landings.

This study was conducted around Bidong Island in Terengganu waters off the east coast of Peninsular Malaysia, where three different depths were examined: 10 m, 15 m, and 20 m in coral reef habitat areas. Three sub-stations were set up as transects centered around Bidong Island, based on the different depths that were 10 m for stations A1, B1, and C1: 15 m for stations A2, B2, C2, and 20 m for stations A3, B3, C3 (Figure 1). The stations were chosen as they were the

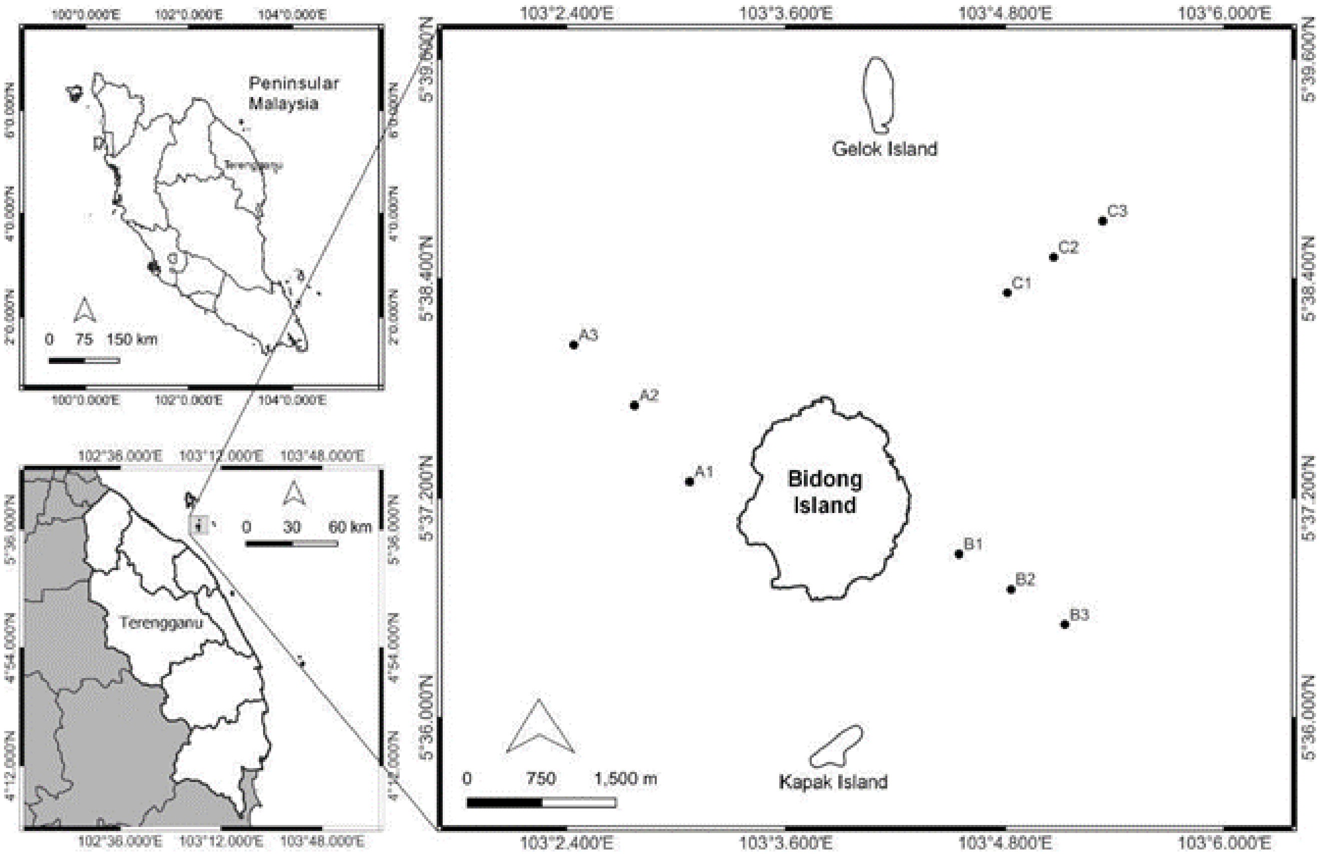

Figure 1. Maps of each sub-stations of artisanal fish trap deployed in Bidong Archipelago (10m: A1, B1, C1; 15m: A2, B2, C2; 20m: A3, B3, C3)

2. Materials and Methods

2.1 Materials

The materials used in this research include traditional artisanal fish traps, an echo sounder SIMRAD EK15, 10% formalin, a ruler, and a local fish reference book.

2.1.1 Ethical approval

This study does not require ethical approval because it does not use experimental animals.

2.1.2 Study Area

common areas frequented by local fishers as their targeted fishing grounds. Bidong Island is on the vast Sunda Shelf platform in the southwestern South China Sea (Afiq-Firdaus *et al.*, 2021). The scientific echo sounder SIMRAD EK15 with a frequency of 200 kHz was used to measure the depths at each sampling station. Bycatch samples were collected weekly through January 2022 and February 2022. There were nine artisanal fish traps that were used at nine substations with different depth contours and were deployed at 1000 hours in the morning, left overnight for 48 hours, and hauled aboard the following morning.

2.1.3 Artisanal Fish Trap

This study conducted using selected traditional artisanal fish traps common around Bindong Island (Figure 2) built with dimension of 1.52 m x 0.92 m x 0.92 m with a wooden frame made and a cover with mesh net that made up from green nylon with a mesh size of 2.54 cm. The funnel was oval shape with diameter of 25 cm x 6 cm, with 25 cm of entrance depth facing straight inside of the trap as shown in Figure 3.

2.2 Morphometric Identification

The retrieved bycatch samples, defined as species other than those listed as target species in Table 1, were measured for total length (TL). Then, identification of fish was performed by integrating a local fish

Figure 2. Design of traditional artisanal fish trap

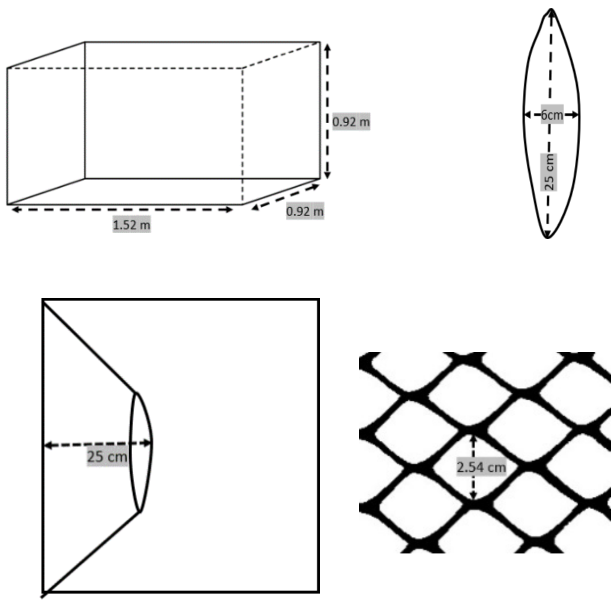

Figure 3. Characteristics of artisanal fish trap used.

reference book to divide the targeted and non-targeted species (Afiq-Firdaus *et al*., 2021). Each species of bycatch was brought to the lab to be preserved with 10% formalin and deposited at the Science Fisheries Collection of the Faculty of Fisheries and Food Sciences, Universiti Malaysia Terengganu, for future reference. The bycatch species were classified into two groups: (1) discarded or non-valuable bycatch (D) and (2) retained or valuable bycatch (R), with each species determined based on local practice.

2.3 Statistical Data Analysis

In this study, the outcomes were further assessed by an independent sample t-test using IBM SPSS Statistics software to perform a bycatch analysis to compare the abundance of bycatch or richness of species between three distinct depth contours using statistical one-way ANOVA. The distribution of bycatch abundance and number of bycatch species captured were analyzed by using Shannon-diversity Weiner's index (H'). These were used to analyze catch data at each depth contour for relative abundance.

3. Results and Discussion

3.1 Result

3.1.1 Distribution of catch composition

During the sampling in January 2022 and February 2022, there were six families, six genera, and seven species of targeted species were successfully captured as shown in Table 1. The capture of distribution fish by depths in 20m (45.54%) is greater than 10 m (21.60%), while the second greater distribution is 15 m (32.86%) (Table 2). As a result, 20 m produces high value can be found and the most abundance of demersal fish captured.

3.1.2 Diversity indices of distribution fish species

The species richness in Station A has a higher diversity of species than in Station C and B (Table 3). As a result, there is insufficient indication that the patterns of local species richness with depth in demersal species follow the general trend. Therefore, H' is calculated where Station A has the lowest values compared to Station B and C. Station A results in high diversity compared to Station B and C, resulting in low diversity of fish species. It can be seen that a depth of 20 m may produce a high level of species richness, as well as an H' index. Stations B and C have the same diversity, and the deeper sets can have larger proportions of fish compositions. Thus, Station A has high species richness but less diversity. The species richness on diverse reefs appearsto vary simultaneously with alterations in unevenness in fish composition.

Table 1. Fish compositions of distribution targeted fish species collected by artisanal fish trap in Terengganu waters (Station A1, B1, C1: 10m, Station A2, B2, C2: 15m, Station A3, B3, C3: 20m)

Family / Species	Common Name	Sub-Station	No. of individuals	(%)
Anguillidae				
Anguilla anguilla	Eel	B1, B2	5	1.21
Lethrinidae				
Lethrinus lentjan	Pink Ear Emperor	A2, A3, B3, C1, C2,C3	26	6.28
Lutjanidae				
Lutjanus johnii	John's snapper	A1,A2, B1, B2,C1	21	5.07
Lutjanus erythropterus	Crimson Snapper	A1,A2, A3, B1, B2, B3,C3	35	8.45
Psettodidae				
Psettodes erumei	Indian Halibut	C1	2	0.48
Rachycentridae				
Rachycentron canadum	Cobia	A2, B1, C2	11	2.66
Sepiidae				
Sepia officinalis	Cuttlefish	A1, A2, A3, B1, B2, B3, C1, C2, C3	113	27.29

Table 2. The comparison between number of fish captured and bycatch collected by the artisanal fish trap at different depth.

Depth	Number of individuals captured (%)	
	Fish Species	Demersal Species
10m	143 (34.54%)	46 (21.60%)
15m	109 (26.33%)	70 (32.86%)
20m	162 (39.13%)	97 (45.54%)

Table 3. The total abundance and ecological indices of bycatch in different stations collected by using artisanal fish trap.

Station	Sub-station	Total abundance	Species richness (d)	Shannon Index (H')	Effective number of species
	A1	13	1.46	0.3	
A	A2	23	2.59	0.36	2.68
	A3	43	4.84	0.33	
	B1	16	1.98	0.35	
B	B2	27	3.35	0.36	2.93
	B3	22	2.73	0.37	
	C1	17	2.05	0.35	
C	C2	20	2.41	0.36	2.89
	C3	32	3.85	0.36	

Table 4. Fish compositions of bycatch species collected by artisanal fish trap in Terengganu waters (D: Discarded, R: Retained), (LC: Least concern, DD: Data deficient, VU: Vulnerable, CR: Critically endan-gered), (Station A1, B1, C1: 10m, Station A2, B2, C2: 15m, Station A3, B3, C3: 20m)

Family / Species	Common Name	Sub-Station	No. of individuals	(%)
Anguillidae				
Anguilla anguilla	Eel	B1, B2	5	1.21
Lethrinidae				
Lethrinus lentjan	Pink Ear Emperor	A2, A3, B3, C1, C2, C3	26	6.28
Lutjanidae				
Lutjanus johnii	John's snapper	A1, A2, B1, B2,C1	21	5.07
Lutjanus erythropterus	Crimson Snapper	A1, A2, A3, B1, B2, B3, C3	35	8.45
Psettodidae				
Psettodes erumei	Indian Halibut	C1	2	0.48
Rachycentridae				
Rachycentron canadum	Cobia	A2, B1, C2	11	2.66
Sepiidae				
Sepia officinalis	Cuttlefish	A1, A2, A3, B1, B2, B3, C1, C2, C3	113	27.29

3.1.3 Diversity of bycatch species

The families of Hemiscylliidae, Tetraodontidae, and Monacanthidae are categorized as bycatch fish, which found the most captured (Table 4). Therefore, the most bycatch species captured were *Chiloscyllium griseum* (16.91%) and *Arothron stellatus* (11.84%), followed by *Monacanthus chinensis* (6.52%) and *Scarus quoyi* (4.11%). These species can be found in all three stations, and all depths except *S. quoyi* can only be found at 10m and 15 m. The most diminutive bycatch species captured were *Carcharhinus melanopterus* (0.24%), *Diodon holocanthus* (0.48%), *Rhynchostracion nasus* (1.69%), *Abalistes stellatus* (1.93%) and *Platax orbicularis* (1.93%). These species can be found in the depths of 10 m and 15 m in a certain station. The most abundant bycatch species are 10 m (48.26%) and 20 m (32.34%), whereas the highest number of fish species captured is at 20 m depth (39.13%) (Table 5). Thereby, the fact that these three habitats significantly varied from one another indicates that the study included a variety of species.

3.1.4 Bycatch species composition

During sample collection in January and February 2022, 10 bycatch species were captured using artisanal fish traps based on local perspectives (Figure 4). In this investigation, *D. holocanthus* was not discovered from the 10 m and 20 m environment, but all types of pufferfish species, *O. nasus* and *A. stellatus*, were trapped at these three depths. There is a different mean on the number of fish catches based on depth of water by using one-way ANOVA (Table 6). The results showed differing mean the number of fish caught at depths 10 m and 15 m, where a number of fish at 10 m is higher than 15 m. Meanwhile, there is no mean difference between 10 m and 20 m (Table 8 and Table 9). However, there is no mean fish trap influenced by stations, where $P<0.662$, while there is significant in fish trap influenced by depth, where $P<0.018$. Since the mean is not normally distributed (Figure 5), non-parametric Kruskal-Wallis H-Test was used. As a result, there is sufficient evidence to indicate that there is a difference in bycatch composition for the three depths in the three locations. The average body length and weight of each bycatch species were determined (Table 7). Based on Station A, the average weight and total length of fish caught was higher at Station A than at Stations B and C.

3.1.5 Diversity indices of bycatch species

Table 3 and Table 10 have discovered that Station B has higher richness in species than Station A and Station C. For the Shannon index, H', Station C resulted in lower values than Stations A and B. This indicates high diversity, while Stations A and B indicate low diversity. The result shows that a depth of 10 m captures a high amount of species richness, including the H' index. This species richness on various reefs seems to change along with changes in the unevenness in the bycatch composition.

Table 5. The comparison between number of fish captured and bycatch collected by artisanal fish trap at different depths.

Depth	Number of individuals captured (%)	
	Fish Species	Bycatch Species
10m	143 (34.54%)	97 (48.26%)
15m	109 (26.33%)	39 (19.40%)
20m	162 (39.13%)	65 (32.34%)

Table 6. ANOVA on bycatch composition of artisanal fish trap influenced by depths and habitats.

Type of fish trap	Abundance			
	df	MS	F	P-Value
Fish traps influenced by depths	2	281,333	8,384	0.018
Fish traps influenced by station	2	49	0.441	0.662

Table 7. Average body length and weight of bycatch species caught from artisanal fish trap from each habitat.

Scientific name	Weight (g)				Total length (cm)			
	A	B	C	AVERAGE	A	B	C	AVERAGE
Chiloscyllium griseum	1480	897	1360	1245.67±307.86	68.4	58.3	65.6	64.10±5.21
Scarus quoyi	1780	985	1757	1507.33±452.50	27.5	23.8	26	25.77±1.86
Arothron stellatus	2280	1210	1790	1760.00±535.63	43.9	38	44.7	42.20±3.66
Rhynchostracion nasus	47	120	98	88.33±37.45	14.8	18.6	18.3	17.23±2.11
Diodon holocanthus	-	540	-	180.00±311.77	0	25.5	0	8.50±14.72
Monacanthus chinensis	190	128	533	283.67±218.14	17.5	16.1	27.9	20.50±6.45
Carcharhinus melanopterus	2200	-	-	733.33±1270.17	66.9	0	0	22.30±38.62
Abalistes stellatus	701	-	487	396.00±359.25	53.8	0	47.4	33.73±29.39
Chelmon rostratus	266	266	-	177.33±153.58	25.6	15	0	13.53±12.86
Platax orbicularis	740	360	-	366.67±370.05	28.7	14.2	0	14.30±14.35

Table 8. Bycatch composition in each depth in Bidong Archipelago, Terengganu waters by using one- way ANOVA

(I) depth	(J) depth	Mean Difference (I-J)	Std. Error	Sig.	Inference
10m	15m	19.333*	4.73	0.015	Significant
	20m	10,667	4.73	0.14	Not significant
15m	10m	-19.333*	4.73	0.015	Significant
	20m	-8,667	4.73	0.238	Not significant
20m	10m	-10,667	4.73	0.14	Not significant
	15m	8,667	4.73	0.238	Not significant

*. The mean difference is significant at the 0.05 level.

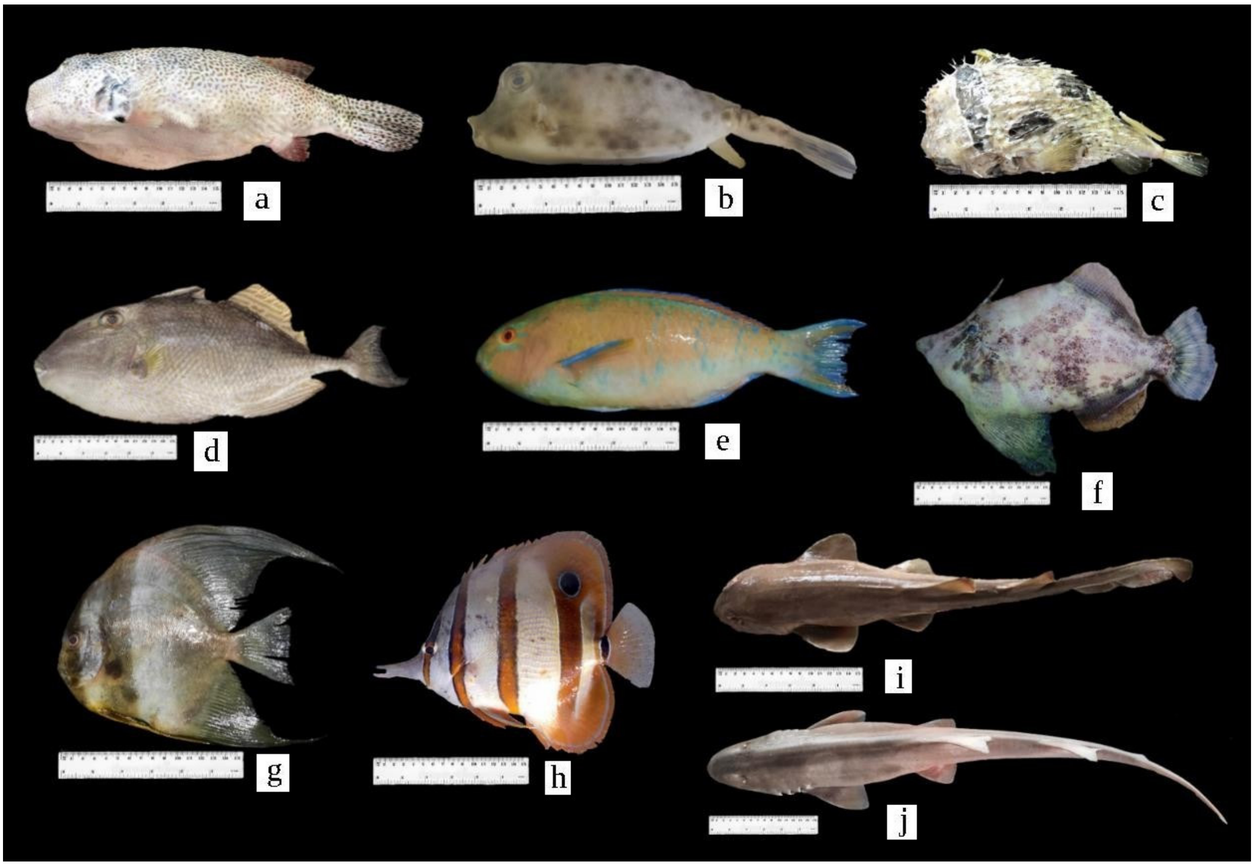

Figure 4. Bycatch species captured by using artisanal fish trap; (a) *Arothron stellatus*, (b) *Rhynchostracion nasus*, (c) *Diodon holocanthus*, (d) *Abalistes stellatus*, (e) *Scarus quoyi*, (f) *Monacanthus chinensis*, (g) *Platax orbicularis*, (h) *Chelmon rostratus*, (i) *Chiloscyllium griseum*, (j) *Carcharhinus melanopterus*

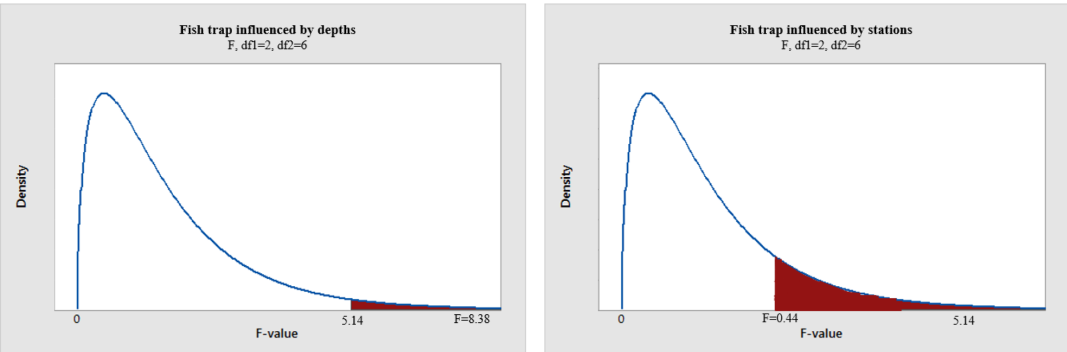

Figure 5. Graph of normally distributed of distribution of bycatch composition.

3.2 Discussion

It was found that the artisanal fish traps employed by the fishermen were unselectively capturing bycatch species (Stevens, 2021) in the waters off Terengganu. Based on this study, fish traps are non-selective fishing tools that catch a wide range of species from numerous families. During periods of overfishing, certain families and species, many of which have historically had little or no commercial value, are particularly susceptible to being captured (Hawkins *et al*., 2007). In this study, the measures of abundance of highly trappable families in Terengganu waters showed steep declines as fishing pressure increased in the Bidong Archipelago (Mohidin *et al*., 2022). Based on a study by Mohidin *et al.* (2022), the majority of them are demersal and pelagic species that are connected to reefs. One possible exception is the fact that as fishing pressure grows on the study reefs, coral cover, and habitat structural complexity diminish (Hawkins and Roberts, 2004). This may impact reef carrying capacity and favor the survival of some species over others, with overfishing of herbivores as a contributing factor to this habitat shift.

Table 9. Bycatch composition in each habitat in Bidong Archipelago, Terengganu waters by using one-way ANOVA

(I) station	(J) station	Mean Difference (I- J)	Std. Error	Sig.	Interference
A	B	-5	8,602	0.835	Not significant
	C	3	8,602	0.936	Not significant
B	A	5	8,602	0.835	Not significant
	C	8	8,602	0.643	Not significant
C	A	-3	8,602	0.936	Not significant
	B	-8	8,602	0.643	Not significant

Table 10. The total abundance and ecological indices of bycatch in different stations collected by using artisanal fish trap.

Station	Sub-station	Total abundance	Species richness (d)	Shannon Index (H')	Effective number of species
	A1	29	3.6	0.36	
A	A2	12	1.49	0.31	2.83
	A3	24	2.98	0.37	
	B1	33	3.69	0.37	
B	B2	21	2.35	0.35	2.95
	B3	26	2.91	0.37	
	C1	35	4.68	0.29	
C	C2	6	0.8	0.24	2.43
	C3	15	2	0.35	

Families of Sepiidae and Lutjanidae are the most abundance captured in distribution of fish composition, meanwhile the high capture rates of bycatch species are from the families Hemiscylliidae, Tetraodontidae, and Monacanthidae. These families were discovered in all three stations and three depths. For distribution, depths of 20 m (45.54%) and 15 m (32.86%) are the most abundant of demersal fish captured. However, for bycatch at depths of 10 m (48.26%) and 20 m (32.34%). Most of the demersal fish captured at Bidong Island are high-value and marketable, however much of the bycatch is retained by the fishers and consumed locally. In Terengganu's perceptions, puffer species such as *A. stellatus*, *R. nasus*, and *D. holocanthus*, are commonly discarded in the open ocean and unable to be sold at fish market ref? (Hamid and Kamri, 2019). Fortunately, *R. nasus* usually gets high demand in selling to the local communities especially villagers in Terengganu to make as home pesticides. They believe it is useful as termite baiting treatment. Due of their low level of demand on the local market, pufferfish are widely regarded as non-valuable bycatch or discarded bycatch in Malaysia (Azman *et al*., 2014).

In addition, 10 species were found among the 201 bycatch individuals, and all of them were regarded as maintained species that were captured by artisanal fish traps. All retained species were assessed to have local commercial value based on the IUCN Use and Trade Classification System and classified as Least Concern (LC) and Data Deficient (DD) in the Red List of the International Union for Conservation of Nature (IUCN, 2021). The findings of this investigation demonstrated that fish traps were used to catch a range of marine species. The ratios of fish composition and bycatch composition for all depths and habitats were different in P-value. The one-way ANOVA of fish and bycatch composition has sufficient results where the mean is not normally distributed which is the evidence to indicate that there is difference in both compositions for three different depths in the three different locations.

Bycatch abundance throughout the Bidong Archipelago was influenced by habitat rather than depth. The most varied bycatch is fish, mostly demersal species, which are caught at various depths and in various habitats. As depth increases, the total diversity, quantity, or biomass of fish species declines gradually or quickly. The body weight and overall length of the bycatch composition have varied between each station. Through average body weight and length in the bycatch analysis, it was found that Station A is the best environment for those fish species. As a result, Station A has a bigger average body weight and total length of the bycatch. The relationship between length and weight can reveal information about a fish's morphology, physiology, life history, age, and growth patterns (Ogle, 2016).

The distribution and species composition of fish were closely correlated with a variety of factors, including the availability of food, breeding sites, water current, depth, topography, and physicochemical characteristics of water (Harris, 1995). The insufficient indication that the patterns of local species richness in the distribution fish composition shows that local niches are automatically supplied by recruitment from a worldwide pool of distinctive species at each depth stratum (Priede *et al.*, 2010), whereby Station A has high species richness than other stations but low diversity. The diversity of demersal fish may show some geographical and temporal variation in the composition of fish species, which is closely tied to complicated physicochemical variables and seafloor geomorphology (Taiga and Katsunori, 2021). Based on H' index of bycatch composition, Station A and B have the same diversity which the shallow sets can have larger proportions of bycatch than the deep sets (Bouwer *et al.*, 2018), and also show different bycatch compositions (Peatman *et al.*, 2018). Hence, Station A has high species richness of fish composition but low diversity, whereas in bycatch composition, Station B has high species richness of bycatch but less diversity. This study showed that *Peronema canescens* may totally replace traditional live bait while still managing to catch targeted species. They can also be utilized to potentially attract bycatch species.

4. Conclusion

In conclusion, by using artisanal fish traps, this study has demonstrated how the distribution and composition of bycatch are affected by the habitat of stations and the water depth of the fish trap's deployment. Bycatch and untargeted species collected at various depths may vary in quantity and variety due to differences in habitat type and intensity. Even though in bycatch composition, Station B has higher species richness with low diversity of bycatch. The use of *Peronema canescens* in artisanal fish traps has been beneficial by expressing nature scent to attract the fish without using live bait. To ensure sustainable fishing and lessen the associated effects of artisanal fish traps on the aquatic ecosystem, appropriate management measures must be implemented. To reduce the strain on fishing, it is advised to restrict competition in the use of artisanal fish traps. The use of time-release mechanisms to lessen the environmental impact of trap fishing should be discussed with the fishermen as part of future activities. It is advised that to get more accurate results, the physical properties of water bodies should be researched and the sampling procedure employing portable traps should be enhanced by using a variety of gear sizes and mesh sizes.

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Authors' Contribution

The contribution of all authors is as follows, Fazrul and Aiman; studied, wrote, and revised the manuscript. Alfeera, Haslina, Yeny, and Azra; supervised the progress, edited, checked, and corrected the manuscript. All authors discussed and contributed to the final manuscript.

Conflict of Interest

The authors declare that they have no competing interests.

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