



***FISHING MOTIVATIONS AND PREFERENCES OF RECREATIONAL  
ANGLERS AT PAY-FISHING PONDS IN SERDANG, SELANGOR***

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**This project report is submitted in partially fulfilment of the  
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**DEPARTMENT OF AQUACULTURE  
FACULTY OF AGRICULTURE  
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**CERTIFICATION OF APPROVAL**

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This is to certify that I have examined the final year project and all corrections have been made as recommended by the panel of examiners. This report complies with the recommended format stipulated in the AKU 4999 project guidelines, Department of Aquaculture, Faculty of Agriculture, Universiti Putra Malaysia.

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## ABSTRACT

This study was conducted to understand the fishing motivations of anglers who fish at pay-fishing ponds in Serdang, Selangor. This study also tried to understand the basic socio-demographic backgrounds of those anglers and their preferences towards non-native fish species in Malaysia. A set of survey questionnaire was used to collect anglers data with a face-to-face sampling technique.

A total of 100 pay-fishing pond anglers were taken part in this study, with 62.5% of response rate. Seventy-four percent of the anglers are Malay anglers (74.0%), and this was followed by Chinese (20.0%) and Indian anglers (6.0%). The highest age group was represented by age of 30 to 39 (46.7%) and were followed by age group of 40 to 49 (32.2%), 20 to 29 (15.6%), and 50 above (5.6%). Most of the anglers are self-employed (38.0%) and most of them have at least Diploma (37.0%). Seventy-five anglers are married (75.0%) while the rest are single.

The results of this study revealed that the angler's fishing motivations are varied. The highest fishing motivation placed by the pay-fishing pond anglers was 'avoiding a moment from stress at work' ( $4.49 \pm 0.54$ ) while the lowest motivation was 'failed to catch a fish' ( $1.78 \pm 1.26$ ). They also like to 'spend time with friends' ( $4.39 \pm 0.60$ ), 'fleeing from the bustle of the city' ( $4.32 \pm 0.65$ ), 'master the technique of fishing' ( $4.30 \pm 0.83$ ), 'enjoy the surrounding' ( $4.20 \pm 0.67$ ), 'catch large and extraordinary fish' ( $4.20 \pm 0.68$ ), 'spend time with family' ( $4.12 \pm 0.91$ ) 'release all captured fish' ( $4.03 \pm 4.1$ ) and 'catch as many fish possible'

(4.01±0.8). However, the results of motivations were found varied between different groups of anglers, based on their basic socio-demographic backgrounds.

In terms of angler's preferences towards the non-native species, most of the anglers preferred to catch kerapu (4.63±0.56), followed by siakap (4.59±0.53) and patin (4.26±0.85). Meanwhile, they are not sure if they prefer to catch keli (3.83±1.19) while fishing. The anglers were satisfied with all of the facilities provided by the management of the pay-fishing ponds, especially on the 'toilet, surau and the pond's parking lot' (4.13±0.65). The findings of this research are useful to improve recreational fishing activities at the pay-fishing ponds in Serdang area, and in Malaysia in general.

## **ABSTRAK**

*Kajian ini dijalankan untuk mengenal pasti motivasi pemancing yang memancing di kolam pancing-berbayar di Serdang, Selangor. Kajian ini juga bertujuan untuk memahami latar belakang sosio-demografik pemancing dan pilihan pemancing terhadap spesies ikan bukan tempatan di Malaysia. Satu set borang kaji selidik telah digunakan bagi mengumpul data pemancing dengan menggunakan teknik pensampelan bersemuka.*

*Seramai 100 pemancing dari kolam pancing-berbayar telah terlibat dalam kajian ini dengan kadar respon sebanyak 62.5%. Tujuh puluh empat peratus adalah terdiri daripada pemancing berbangsa Melayu, dan ini diikuti oleh pemancing berbangsa Cina (20.0%) dan India (6.0%). Golongan umur yang tertinggi adalah golongan 30 hingga 39 tahun (46.7%) dan diikuti dengan golongan yang berumur 40 hingga 49 tahun (32.2%), 20 hingga 29 tahun (15.6%), dan 50 tahun keatas (5.6%). Kebanyakan pemancing bekerja sendiri (38.9%) dan mempunyai sekurang-kurangnya diploma (37.0%). Tujuh puluh lima pemancing telah berkahwin (75%) manakala yang selebihnya masih bujang.*

*Keputusan daripada kajian ini mendapati terdapat pelbagai motivasi yang menjadi pendorong kepada pemancing. Peratusan paling tinggi menunjukkan pemancing memancing di kolam pancing-berbayar adalah untuk 'melarikan diri daripada tekanan di tempat kerja' ( $4.49 \pm 0.54$ ), manakala peratusan yang paling rendah adalah kerana 'gagal untuk mendapatkan ikan' ( $1.78 \pm 1.26$ ). Ada dikalangan mereka juga gemar untuk 'meluangkan masa bersama rakan' ( $4.39 \pm 0.60$ ), 'lari daripada*

*kesibukkan kota* ( $4.32 \pm 0.65$ ), *'mempertajamkan teknik memancing'* ( $4.30 \pm 0.83$ ), *'menikmati keindahan kawasan sekitar'* ( $4.20 \pm 0.67$ ), *'menangkap ikan yang besar dan luar biasa'* ( $4.20 \pm 0.68$ ), *'meluangkan masa bersama keluarga'* ( $4.12 \pm 0.91$ ), *'melepaskan semula hasil tangkapan'* ( $4.03 \pm 4.1$ ), dan *'menangkap sebanyak mana ikan yang mereka boleh'* ( $4.01 \pm 0.8$ ). Walaubagaimanapun, keputusan motivasi pemancing adalah pelbagai mengikut kumpulan latar belakang sosio-demografik mereka.

Dari segi pilihan pemancing terhadap spesis ikan bukan tempatan, kebanyakan pemancing lebih memilih untuk menangkap kerapu ( $4.63 \pm 0.56$ ), diikuti dengan siakap ( $4.59 \pm 0.53$ ) dan patin ( $4.26 \pm 0.85$ ). Sementara itu, mereka tidak pasti jika mereka lebih suka menangkap ikan keli ( $3.83 \pm 1.19$ ) semasa memancing. Para pemancing rata-rata berpuas hati dengan kesemua kemudahan yang disediakan oleh pihak kolam pancing-berbayar, terutamanya kemudahan 'tandas, surau dan kemudahan tempat parkir' ( $4.13 \pm 0.65$ ). Penemuan kajian ini boleh digunakan untuk memperbaiki aktiviti perikanan rekreasi di kolam pancing-berbayar di kawasan Serdang dan di Malaysia secara amnya.

# CHAPTER 1

## INTRODUCTION

### 1. Introduction

According to Magee et al. (2018), during the past three decades, various writers have focused increasingly on the catch aspects of sport fishing. Kuehn et al. (2017) posed the question, "why do anglers really fish?". In response, they observed that the anglers pursue their 'sport' to catch fish. Meanwhile, Matlock et al. (1988) claimed that, "we must remember that the first word in fishing is fish". Nevertheless, most scientific studies of angler's motivations suggested that fishing experiences involve many dimensions besides catching fish (Sutton and Oh 2015). However, the relationship between catching fish, harvesting them, and fishing behavior of anglers have never been fully examined.

Practical reasons exist for studying angler motivations. Besides to the extent managers could understand the basic components of fishing motivation, they can also be more effective in developing angler's programs and services (Driver 1985). For example, if a subpopulation of anglers is increasingly interested in 'high catch rates' but places lower importance on 'harvesting fish', managers could devote more effort to catch-and-release programs and might consider supplemental stocking. Consequently, by ignoring angler's motivations, managers might not be able to provide an appropriate balance of angling opportunities to meet the public needs. This is important because fishing motivations have shown to be highly related to

the expected outcomes or satisfaction derived from angling participation (Fedler and Ditton 1994).

In the field of recreational fisheries in Malaysia, the big question that always arises is, why do the anglers choose to fish at pay-fishing ponds. The main reasons to understand 'why' the anglers choose to go for fishing at the pay-fishing ponds are, in order to serve them better and to increase their fishing satisfaction. The main problem is, there is lack of data regarding motivations of anglers in Malaysia in general. To be specific, who are these anglers and why they go fishing? What is their age, race, education level and income? The next question arises if the different socio-demographic backgrounds among the pay-fishing pond anglers have different fishing motivations and preferences towards fish species, especially the non-native species. The justification behind this is that many pay-fishing pond owners always introduce the non-native species into their ponds to attract more anglers to come to their ponds. Some examples of the non-native species are *Labeo rohita* (rohu), *Cyprinus carpio* (Lee Koh) and *Pangasianodon gigas* (Mekong).

High demand for the non-native species for fishing among anglers in Malaysia has led to the idea to understand the preferences towards non-native species as tested in this study. It is believed that the non-native species provides anglers some new experiences in fishing. However, if the non-native species escaped to the natural waters and natural environment, they may severely impact to the natural waters and could threaten the local or native fish species.

Knopf et al. (1973) suggested that anglers were strongly motivated by four principal factors: temporary escape, achievement, exploration, and the experience of natural settings. The importance to understand fishing motivations among anglers is that we will be able to manage the anglers better, by understanding their needs and desires while they go fishing.

Therefore, this study tried to understand the basic socio-demographic backgrounds of pay-fishing pond anglers. This study also tried to understand the fishing motivations of pay-fishing pond anglers and their preferences towards the non-native fish species.

The objectives of this study are as below:

1. to determine the basic socio-demographic backgrounds of pay-fishing pond anglers in Serdang, Selangor.
2. to determine fishing motivations of pay-fishing pond anglers in Serdang, Selangor
3. to determine preferences of pay-fishing pond anglers towards the non-native fish species in Serdang, Selangor.



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