

Pacific Coast Fish Identification Application

FY 2014 Proposal

Ed Hibschi

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1. Overview

1.1. Sponsor

Steve Williams

1.2. Focus Group

Survey Design and Evaluation

1.3. Background

Recreational fishing survey data are resulting in increasing numbers of unspciated reported catch. Much of this catch is categorized as “unidentified fish” or “rockfish genus”. These broad categorizations are not helpful (and possibly harmful) to management of protected species. In addition, it is believed that many species are “misidentified” by anglers and charter crew. There is a study currently underway to assess the degree of misidentification.

1.4. Project Description

This project proposes to design and develop a fish identification application that can be used on mobile devices by samplers and anglers to aid in accurately identifying observed and reported catch.

1.5. Public Description

1.6. Objectives

1. A fish identification app can be used by samplers in conjunction with mobile data collection devices to more quickly and accurately identify species they encounter. Currently samplers are using field guide books for this purpose. Guidebooks are limited in the number of pictures used to depict a particular species, while an electronic app can utilize a large number of pictures to show the varied appearance of the fish. An application can also be designed to walk the sampler through a set of identification criteria for correctly identifying a fish species. 2. This application will be made available free to anglers who wish to increase their knowledge about different species and more accurately identify the species that they catch or release. As anglers are asked to become more participative in their efforts to return released rockfish to the appropriate depth to avoid barotrauma mortality, we are obligated to assist them in being better able to identify species of concern.

1.7. References

“Wisconsin Fish” mobile application (available in iTues and Google Play) Guide to the Coastal Marine Fishes of California (1972); Daniel J. Miller and Robert N. Lea Certainly More Than You Want to Know About the Fishes of the Pacific Coast: A postmodern Experience (2011); Milton S. Love The Rockfishes of the Northeast Pacific (2002); Milton S. Love, Mary Yoklavich, and Lyman Thorsteinson California Rockfishes and Associated Species (poster) (2006); John Edward Budrick

2. Methodology

2.1. Methodology

A contractor will be hired to assist in the design and development of this application. It will be developed to function across all mobile operating systems and devices. It will be designed in a very similar fashion to the “Wisconsin Fish” app developed by the University of Wisconsin.

2.2. Region

Pacific

2.3. Geographic Coverage

Pacific coast fish will be included in the species scope.

2.4. Temporal Coverage

2.5. Frequency

2.6. Unit of Analysis

2.7. Collection Mode

3. Communication

3.1. Internal Communication

Communication with content sources and programming vendor will be through regular email as required. Monthly MRIP project updates in MDMS.

3.2. External Communication

On completion, conference calls with all state DFWs will be conducted to announce release and discuss outreach. Effort will be made to contact as many recreational fishing organizations via phone/email to create awareness. Release will be posted in Apple app store and Google Play as well as social media outlets.

4. Assumptions/Constraints

4.1. New Data Collection

N

4.2. Is funding needed for this project?

Y

4.3. Funding Vehicle

RecFIN grant

4.4. Data Resources

A source for content will need to be determined. The desire is to work in collaboration with the authors of the various field guides in use currently to gain access and permission to use their material in an electronic format.

4.5. Other Resources

4.6. Regulations

4.7. Other

5. Final Deliverables

5.1. Additional Reports

5.2. New Data Set(s)

5.3. New System(s)

The completed application will be available for free in Apple's App Store as well as Google Play

6. Project Leadership

6.1. Project Leader and Members

| First Name | Last Name | Title | Role | Organization | Email | Phone 1 | Phone 2 |
|------------|-----------|-------|-------------|--------------|-------------------|--------------|---------|
| Edward | Hibsch | | Team Leader | PSMFC | ehibsch@psmfc.org | 503-595-3100 | |
| Craig | Miller | | Team Member | PSMFC | cmiller@psmfc.org | 503-595-3100 | |

7. Project Estimates

7.1. Project Schedule

| Task # | Schedule Description | Prerequisite | Schedule Start Date | Schedule Finish Date | Milestone |
|--------|-------------------------|--------------|---------------------|----------------------|-----------|
| 5 | Launch and Release | 4 | 03/02/2015 | 03/20/2015 | |
| 2 | Identify/secure content | | 06/02/2014 | 07/31/2014 | |
| 3 | Programming | 1 | 07/01/2014 | 12/31/2014 | |
| 1 | Design/Layout | | 06/02/2014 | 06/30/2014 | |
| 4 | User acceptance testing | 3 | 01/05/2015 | 02/27/2015 | |

7.2. Cost Estimates

| Cost Name | Cost Description | Cost Amount | Date Needed |
|-------------------------|------------------------|-------------|-------------|
| Application programming | Programming contractor | \$25000.00 | 03/03/2014 |
| TOTAL COST | | \$25000.00 | |

8. Risk

8.1. Project Risk

| Risk Description | Risk Impact | Risk Probability | Risk Mitigation Approach |
|--|--|------------------|--|
| Time required to complete programming has been estimated. Actual required time will be determined when a vendor is sought to complete the work. Programming may take longer than originally planned. | Release of application will be delayed. | Medium | We will begin scoping of work and solicit feedback from parties involved as soon as possible to allow for ample programming time. |
| Most significant risk is the inability to secure required content through publication authors. | Impact would be severe lack of content to utilize in the app, possibly jeopardizing successful completion. | Low | Email communication will be sent to authors to explain the scope of the project and invite collaboration prior to any programming work. We intend to keep the authors' best interests at heart throughout the project and will seek their input and advice throughout the project. |

9. Supporting Documents