Abstract Formatting Details

Use only MS Word, left justification, no line separation between paragraphs, and one tab at the beginning of each paragraph.

1. Title
2. Author(s)
3. Affiliation(s)
4. Body

1. Title

Please do not capitalize all words;
Use italic and capital letters where appropriate.

Example:
Environmental impact assessment of squid fisheries in Japan using RS/GIS

2. Authors

a) Order: ***First*** Name ***Last*** Name;
b) Separate co-authors' names by **comma**;
c) Last two co-authors' names are separated with "**and**";
d) Put **numbers** of corresponding affiliations after the last names;
e) Underline the name of the presenter

AUTHORS FORMAT:
First Name *Last* Name *Affiliation* Number, *First* Name *Last* Name *Affiliation* Number and *First* Name *Last* Name *Affiliation* Number

Example:
William T. **Peterson**[1], Tracy Shaw[2], Jennifer Menkel[2], and Leah Feinberg[2]

3. Affiliation

Affiliations and email: for **all** co-authors;

AFFILIATION FORMAT:
Affiliation Number *Affiliation* Name, City, Country *E-mail*

Example:
[1]University of Washington, Seattle, WA, USA. E-mail: WTPeterson@u.washington.edu
[2]San Francisco State University, Tiburon, CA, USA. Email: Tracy_Shaw@sfsu.edu

4. Body

Figures and tables are allowed as long as the abstract fits on one page and text is no longer than 300 words. Typically, one page fits 500-600.

One-Institute example

Environmental impact assessment of squid fisheries in Japan using RS/GIS

Hidetada Kiyofuji, Sei-ichi Saitoh, Kazuhito **Watanabe** and Teisuke Mimura

Hokkaido University, Hakodate, Japan. E-mail: kiyo@salmon.fish.hokudai.ac.jp

The Japanese common squid, *Todarodes pacificus,* is the most important species in Japanese squid fisheries and constitutes the majority of Japanese squid catch. Squid are caught in three types of water: distant, offshore, and coastal. Total number of squid fishing fleet in offshore water and on coastal water is over 20,000 in Japan. Japanese squid fishing fleet operate using strong lights (180kW per fleet) to attract squid at night. These lights can be observed on nighttime OLS (Operational Linescan System) image of the DMSP (Defense Meteorological Satellite Program). Squid fishing fleet were defined as the bright areas created by two-level slicing methods on DMSP/OLS images. Squid fishing fleet were mainly identified along the east coast of Korea, between Cheju and Tsushima Islands, around Yamato Rise, along the coast of Honshu, and in northern portions of the Japan Sea. Based-on the questionnaires survey examining fuel consumption and CO_2 emissions of one squid fishing fleet per year, total fuel consumption and CO_2 emission are 96161.3 (*l*) and 12.7 (tones/one million Japanese yen), respectively. This study aims to evaluate environmental impact of squid fisheries in Japan using RS/GIS. Assuming that the number of fishing fleet are estimated from DMSP/OLS night time visible image, net fuel consumption and CO_2 emission also can be evaluated from the image. The consequences regarding spatial distribution of squid fishing fleet and fuel consumptions are then explored using GIS. Our study would contribute to reduce the fuel consumptions and greenhouse gases for effective energy use of squid fishing operation.

Multi-Institute Example

An overview of the ecology and population dynamics of euphausiids around the Pacific Rim

William T. **Peterson**[1], Tracy Shaw[1], Jennifer Menkel[1] and Teisuke Mimura [2]

[1]Hatfield Marine Science Center, Newport, OR, USA. E-mail: bill.peterson@noaa.gov
[2]Hokkaido University, Hakodate, Japan

This talk will address several goals of the workshop, including (but not limited to) a discussion of why krill would be an appropriate indicator species on which to base model comparisons. This goal will be accomplished by presenting to the Workshop participants the results of the first meeting of PICES WG 23, a new working group that will undertake a comparison of the life history and population dynamics of *Euphausia pacifica* and *Thysanoesss* spp. around the Pacific Rim. We are experts on the life histories of krill and we have a broad perspective on marine ecosystems. We will provide to the modelers in attendance a table which lists values for various physiological rates including ingestion rates as a function of food concentration, egg production rates, and growth rates (from cohort analysis of bongo tow samples and from direct measurement

of molting rates in the laboratory), and age structure and mortality rates derived from our biweekly-monthly sampling program. One important message is that at the individual level, euphausiid rates are extremely variable, thus the ability to model these animals successfully may depend on the ability to deal with them in individual based models, rather as an "average individual" in more traditional NPZ models.