Tuesday, March 29th: Workshop Session in Treadwell Ballroom

8:00-8:45 AM: Registration

8:30-9:00: Coffee

9:00-10:00: ***Part I: Oceanography and Ecosystem Status***

Introduction (*Burke/Beckman*)

- General format
- Activities and Expected outcomes/products

Wainwright and Beckman – Tom's movie of ocean conditions, with annotation

10:00-10:30: Coffee Break

10:30-12:30: **Regional background: effects of the blob and El Niño on regional ecosystems**

- Yasumiishi – Alaska
- Trudel – British Columbia
- Peterson/Weitkamp – Oregon/Washington
- Wells – California

12:30-2:00 ***LUNCH BREAK (could well involve beer)***

2:00-3:30: ***Part 2: The salmon response***

The blob versus specific stocks – what's the score?

A chance for individuals to provide a slide or two, showing how the anomalous conditions may have affected salmon stocks or forecasting models. We will ask a handful of people to show slides, but welcome additional slides by *anyone*!

3:30-4:00: Coffee Break

4:00-4:30 **Exercise:** Mapping the blob onto the salmonscape – spatial and temporal patterns of effects on adult size and abundance – may lead to multi-author manuscript

4:30-5:00: **Next steps** – Basecamp, opportunities for collaborations across regions and surveys, and future meetings

Workshop Description

Our goals are to 1) better understand oceanographic processes shaping the productivity of salmon stocks and 2) foster discussion, collaboration and synthesis among students of salmon working in the Northeast Pacific.

Part 1: Oceanography and Ecosystem Status

We will begin the workshop with a small number of presentations and informal discussion of current oceanographic conditions in the NE Pacific and associated ecosystem status. The goal of this session is to set the stage for discussing the current status of salmon stocks in the NE Pacific in the afternoon.

1. The Blob – The Movie

    Using the movie created by Tom Wainwright, we will walk through the NE Pacific oceanography from 2013 through 2015. Discussion will focus on the evolution of the major anomalies in atmospheric and oceanic conditions.

2. Regional Ecosystem Status

    The blob and El Niño are geographically large phenomena. But for individual organisms, impacts of these events are felt on a local scale. Working from north to south, we will describe and discuss the regional signals observed as a result of the larger scale physical processes. Regional discussions will be led by guest speakers for:

    - Alaska
    - British Columbia
    - N Cal Current
    - C Cal Current

Part 2: The salmon response

3. Your stock of interest and the blob: what's the score?

Results sharing and discussion. A chance for individuals to provide a slide or two, showing how the anomalous ocean conditions may have affected salmon stocks and forecast accuracy for adult returns of these stocks. We will ask a handful of people to show slides, but encourage additional slides by *anyone*!

4. Mapping the blob onto the salmon-scape: Temporal and spatial patterns in survival and size anomalies.

This is a group exercise. Did the blob simultaneously disrupt both the California Current and Gulf of Alaska ecosystems, or were there temporal and spatial specificity to the effects of the blob? Given that different stocks of salmon reside in different areas of the NE Pacific at different times, can we document the effects of the blob by examining the onset of anomalies in salmon SARs and adult size across species along a latitudinal transect from the Gulf of Alaska to Central California? We are requesting the help of workshop participants to populate a google spreadsheet documenting return rates and/or adult size at age for adults from specific populations. From these results, we will identify anomalies that can be associated with spatially and temporally specific effects of the blob. Given time constraints during the workshop, we encourage you to populate the spreadsheet prior to the meeting, but there will also be a chance to edit it at the meeting. Please contact brian.burke@noaa.gov (206-860-3486) for further details and instructions. There is potential for this exercise to lead to a publication in a special issue (along with impacts of the blob on other aspects of the ecosystem). The particular journal has yet to be decided. The author list would include all participants in the exercise.