

CAPAM workshop on spatial stock assessment models

October 1-5, 2018 in La Jolla, California, USA

The workshop will run from 9am-5pm (except Monday and Friday) with 1hr for lunch and 30 min for each of the morning and afternoon breaks (except Monday). The morning session on Monday will be a Stock Synthesis tutorial. Friday will be dedicated to general discussions and discussions specifically to bigeye tuna. All presentations will be 20 mins + 10 mins for questions, unless otherwise indicated in which they will be 50 mins + 10 mins questions. A social event will be held on Wednesday at 5-8:30pm (a government issued form of ID is required). Lunch can be ordered in the morning of each day. Other lunch options are very limited.

Monday

SS tutorial

10:00 SS tutorial (Juan Valero)

12:00 Lunch

Defining spatial structure

1:00 Welcome

1:15 Steve Cadrin. (1 hr) Defining Spatial Structure of Fisheries

2:15 Peter Kuriyama. Identifying spatial scales and synchrony in dynamics with empirical dynamic modeling from the CalCOFI ichthyoplankton survey

2:45 Ricardo Oliveros-Ramos. Distribution areas of Jack Mackerel (*Trachurus murphyi*) in the South Pacific

3:15 Coffee break

3:30 Cleridy Lennert-Cody. A Multivariate Tree-based Method for Exploring Stock Structure in Multiple Data Sets

4:00 Carolina Minte-Vera. Spatial structure assumptions for the population dynamics model of bigeye tuna in the eastern Pacific Ocean

4:30 Discussion

Tuesday

Movement: Data and theory

9:00 Andrew Hein. The primacy of space: movement theory, past, present, and future

9:30 Chi (Tim) Lam. Telemetry Analysis of Highly Migratory Species

10:00 Coffee break

10:30 Haikun Xu. Estimating the movement rate of bigeye tuna in the eastern Pacific Ocean based on conventional tagging data

11:00 Discussion

Spatial stock assessment models

11:30 Andre Punt (1 hr) Spatial stock assessment methods: A review of current approaches and assumptions

12:30 Lunch

1:30 Katelyn Bosley. Consequences of misspecifying population structure within spatially explicit stock assessment models

2:00 Molly Morse. Simulation testing stock assessments of spatially-structured Atlantic bluefin tuna stocks Monday morning (10/1) through Thursday morning (10/4)

2:30 Sophie Mormede. The Spatial Population Model software for management support

3:00 Coffee break

3:30 Jie Cao. A simulation comparison of spatiotemporal and spatially-implicit size-structured models

4:00 Discussion

Wednesday

9:00 John T. Trochta. Incorporating spawn surveys in a semi-spatial stock-recruitment model

9:30 Rishi Sharma. State Space Models for salmon: What can be learned and applied to marine species?

10:00 Coffee break

Integrating tagging data

10:30 Dan Goethel. (1 hr) Where Do You Think You're Going? Improving the Spatial Dynamics of Stock Assessment Models by Incorporating Tagging Data

11:30 Matthew Vincent. Simulation Analysis of a Spatially Explicit Tag-Integrated Catch-at-Age Model that Estimates Natural Mortality and Reporting Rate and Application to Lake Erie Walleye

12:00 Lunch

1:00 Mark Maunder. Using spatio-temporal models of tagging data to deal with incomplete mixing

Other information

1:30 Lisa Kerr. Incorporating mixed stock information into assessment and management

2:00 Patrick Lehodey. A spatially-explicit population dynamics and stock assessment model driven by environmental variables

2:30 Simon Hoyle. Scaling factors for multi-region stock assessments, with adjustments for ocean area.

3:00 Coffee break

3:30 Discussion

5:00 – 8:30 social event. A government issued form of ID is required.

Thursday

Applications

9:00 John Hampton. Spatially-Structured Tuna Stock Assessments in the Western and Central Pacific Ocean

9:30 Adam Langley. A spatially structured stock assessment of Indian Ocean yellowfin tuna

10:00 Coffee break

10:30 Sophie Mormede. An example of multi-area modeling using CASAL

11:00 Rajeev Kumar. Spatial survey-based assessment model for the Grand Banks stock of American plaice in Newfoundland and Labrador

11:30 Jonathan Smart. Accounting for spatial structure in length-and-age-based stock assessment models: An example from South Australia

12:00 Lunch

1:00 Juan Valero. Exploratory spatially-structured models for bigeye tuna in the eastern Pacific Ocean

1:30 Discussion

Management implications

2:30 Aaron Berger. (1 hr) Setting boundaries: the intersection of management actions and spatial population structure

3:30 Coffee break

4:00 Discussion

Friday

9:00 General Discussion

10:00 Coffee Break

10:30 Bigeye tuna specific discussions

12:00 Lunch

1:00 Bigeye tuna specific discussions continued

4:00 end