

INTERNATIONAL PACIFIC



HALIBUT COMMISSION

Celebrating 100 Years

Integrating biological research, fisheries science and management of broadly distributed flatfish species across the North Pacific Ocean in the face of climate and environmental variability

Workshop 7

2024 PICES Annual Meeting, 26 October 2024

Convenors:

Josep Planas, IPHC, U.S.A., corresponding Mackenzie Mazur, D.F.O, Canada Naoji Tojo, Hokkaido University, Japan Roman Novikov, KamchatNIRO, Russia





- Background on the Workshop
- Agenda for Workshop 7





Past and current activities within PICES

- Workshop #2: 2019 PICES Annual Meeting
- Workshop #5: 2022 PICES Annual Meeting
- Workshop #7: 2023 PICES Annual Meeting
- Workshop #7: 2024 PICES Annual Meeting

PICES-2019 Annual Meeting:

in a Changing North Pacific



North Pacific Marine Science Organization

Integrating biological research, fisheries science and management of Pacific halibut and other widely distributed fish species across the North Pacific in the face of climate change and environmental variability

by Josep V. Planas, Gordon H. Kruse and Chris Rooper



Participants of Workshop 2 at PICES-2019, Victoria, Canada.



Integrating biological research, fisheries science and management of Pacific halibut and other widely distributed fish species across the North Pacific in the face of climate and environmental variability

Co-sponsors: IPHC

Duration:

1 day

Convenors:

Josep Planas, corresponding

(International Pacific Halibut Commission - IPHC)

Gordon Kruse

(University of Alaska Fairbanks, USA)

Chris Rooper (DFO, Canada)

Roman Novikov

3 invited talks

Invited Speakers:

Janet Duffy-Anderson (NOAA, USA)

Mark Lomeli (PSMFC, USA)

David Wilson (IPHC)

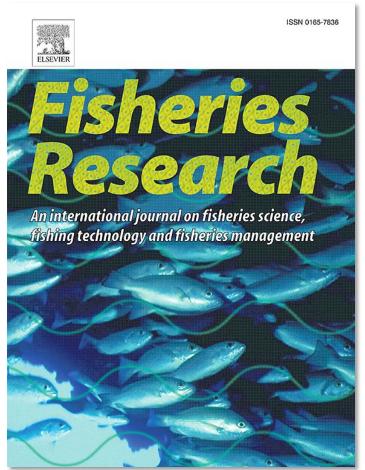
- 14 oral presentations
- 9 posters
- 40 attendees

(Kamchatka Research Institute of Fisheries and Oceanography, Russia)

Naoki Tojo

(Hokkaido University, Japan)

Publication of a special issue in Fisheries Research





Special issue

Integrating biological research, fisheries science and management of Pacific halibut (Hippoglossus stenolepis) across the North Pacific Ocean

Last update 29 November 2022

The Pacific halibut (Hippoglossus stenolepis) is a key species in the North Pacific Ocean ecosystem due to its wide distribution along the continental shelf and to its important trophic position. In addition to its key ecological role, the Pacific halibut is highly relevant from a socio-economic and cultural perspective in the North Pacific Ocean region because it supports important commercial, recreational and ceremonial or subsistence fisheries. In the Northeastern Pacific Ocean, the Pacific halibut stock in waters off North America is managed by the International Pacific Halibut Commission (IPHC) that also conducts research on the biology of the species. Due to its highly migratory nature, its key ecological role and its wide distribution in the North Pacific Ocean, increased efforts are needed to expand and integrate information on the biology and the management of the Pacific halibut across all countries involved in its fisheries, particularly in the face of a changing North Pacific Ocean. Therefore, the main objective of this special issue is to provide state-of-the-art information on important current topics related to the biology of Pacific halibut as well as fishery management and policy issues for this important fish species.

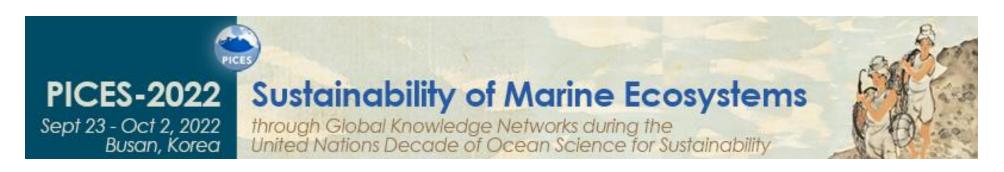
Guest Editors:

Josep Planas

Gordon Kruse

Chris Rooper

Roman Novikov



Workshop 5

W5: FIS Topic Workshop

Integrating biological research, fisheries science and management of broadly distributed flatfish species across the North Pacific Ocean in the face of climate and environmental

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NORTH PACIFIC MARINE SCIENCE ORGANIZATION

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PICES-2022 W5: Integrating biological research, fisheries science & management of broadly distributed flatfish species across the North Pacific Ocean in the face of climate and environmental variability

Josep Planas (corresponding; USA), Chris Rooper (Canada), Naoki Tojo (Japan), Roman Novikov (Russia)

Background

7 oral pre

The North Pacific Ocean is a large and productive ecosystem characterized by strong interdecadal climate variability. This Ocean basin supports a number of fish species of great ecological and economic importance. A successful PICES

The second invited speaker, Dr. Patrick Thompson of Fisheries and Oceans Canada, gave a live online presentation on the effects of changes in temperature and oxygen concentrations in waters off the West coast of the

Naoki Tojo (Japan)

Invited Speakers:

Melissa Haltuch

(Northwest Fisheries Science Center, NOAA, USA)

Patrick Thompson

(Pacific Biological Station, Fisheries and Oceans Canada)

Takeshi Tomiyama

(Hiroshima University, Japan)



W7: FIS Topic Workshop

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PICES 2023 Workshop Report - W07

Integrating biological research, fisheries science and management of flatfish species in the North Pacific Ocean in the face of climate and environmental variability

Josep Planas, Mackenzie Mazur, Naoki Toj, and Roman Novikov

Vol. 32, No. 2 | Summer 2024

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Workshop

2023 PICES Sunday, Oct Seattle, WA

13 oral pres

Convenors

Josep Planas (corresponding; USA)

Mackenzie Mazur (Canada)

Naoki Tojo (Japan)

Roman Novikov (Russia)

Invited Speakers

Dr. Philina English (DFO, Canada)

Dr. Allan Hicks (International Pacific Halibut Commission, USA)

Dr. Noelle Yochum (Trident Seafoods, USA)

introduction to the Workshop. The session featured 3 invited presentations and 9 regular oral presentations. The various presentations covered specific topics related to a) assessing the effects of environmental variability on the Pacific halibut fishery (English, Hicks, Webster, Young), b) food webs and productivity (Surma, Wolf), c) population genomics (Jasonowicz), d) parasitic infections (Kroska), e) bycatch and depredation (Yochum, Christie, Dykstra), and f) reproductive biology (TenBrink, Jones).

After the presentations, a discussion session took place among participants. The discussed topics including next steps for methods to understand the impact of climate change on flatfish species, improved understanding of the impacts of climate change on flatfish and implications

FO, BC, Canada)

Allan Hicks

(International Pacific Halibut Commission (IPHC), Seattle, WA, USA)

Noëlle Yochum

(Fishing Innovation and Sustainability, Trident Seafoods, Seattle, WA, USA)

Slide 7





Workshop 7

2024 PICES Annual Meeting Saturday, October 26, 2024 14:00 – 17:00 Honolulu, HI (USA)

6 oral presentations (1 invited)

W7: FIS Topic Workshop

Integrating biological research, fisheries science and management of flatfish species in the North Pacific Ocean in the face of climate and environmental variability

Co-sponsor:

<u>IPHC</u>

Duration:

TBD

Convenors:

Josep Planas (USA), corresponding

Mackenzie Mazur (Canada)

Roman Novikov (Russia)

Naoki Tojo (Japan)

Invited Speaker:

Shuyang Ma

(Institute of Marine Research (IMR), Bergen, Norway)





Workshop 7: Agenda

14:00-14:10 Welcome and Introduction to the Workshop

14:10-14:40 Invited Speaker: *How to explore climate-induced fish population dynamics? – conceptual frameworks and statistical advancements. –* Dr. Shuyang Ma, Institute of Marine Research, Bergen, Norway.

14:40–15:00 Oral Communication: *Can nearshore surveys improve management of flatfishes with coastal habitat dependencies?* – Dr. Lorenzo Ciannelli, Oregon State University, Corvallis, Oregon, USA (PRE-RECORDED).

15:00-15:20 Oral Communication: *How are environmental conditions influencing productivity of Petrale Sole in Canada?* – Dr. Philina English, Fisheries and Oceans Canada, Nanaimo, British Columbia, Canada.

15:20-15:40 Coffee Break

15:40–16:00 Oral Communication: *Non-Linear Catchability and Optimal Fisheries Management Target.* – Dr. Minling Pan, NOAA Pacific Islands Fisheries Science Center, Honolulu, Hawaii, USA.

16:00-16:20 Oral Communication: Spatial characterization of histology-based maturity estimates for female Pacific halibut in the Northeastern Pacific Ocean.
Dr. Josep Planas, International Pacific Halibut Commission, Seattle, Washington, USA.

16:20-16:40 Oral Communication (Pre-recorded): Evaluating the impact of age data on Petrale Sole stock assessment and management under varying environmental conditions.— Dr. Mackenzie Mazur, Fisheries and Oceans Canada, Nanaimo, British Columbia, Canada. (WITHDRAWN).

16:40-17:00 Discussion

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