

#### Marine Socio-Ecological Systems Symposium

Tuesday June 04, 2024/02:50-03:05 PM(S6)

## World Natural Heritage Shiretoko: Research on banya at the tip area of Sea of Okhotsk side

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## Coastal Areas of Japan

fishing villages

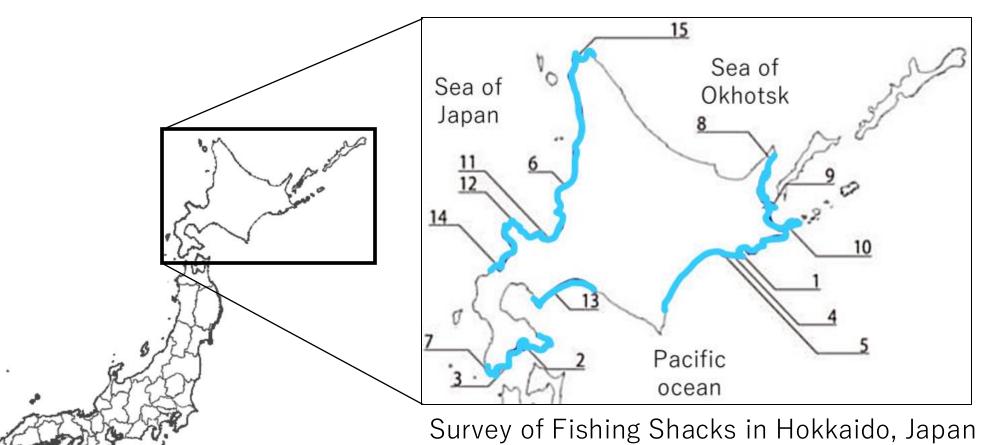
- multifaceted functions (The Fisheries Agency, Japan, 2022)

fishing camps

fishing vessel

primary supporters are generally fishermen

(Yanagi, 2009)



Buildings reflecting the characteristics of the catch have a significant impact on the formation of the region-specific landscape (Miki, 2016)

# **Objectives**

To clarify the **distribution** and **current use**, and **the stakeholders involved** 

To qualitatively clarify the extent to which fishing camps can contribute to coastal conservation

# Study site Hokkaido A wid

#### World Natural Heritage Shiretoko

• A wide variety of species, including commercially important fish species, inhabit the area (Sakurai, 2007)

- Voluntary management methods by fishermen (Makino, 2009)
- Banya, which are auxiliary facilities of the salmon fixed-net fishery

(Ministry of the Environment, Japan, 2017)

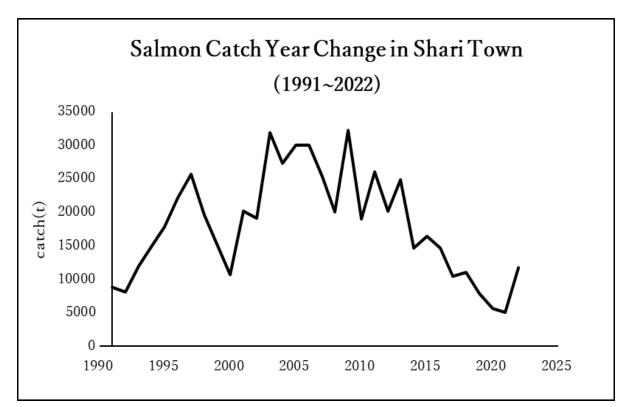


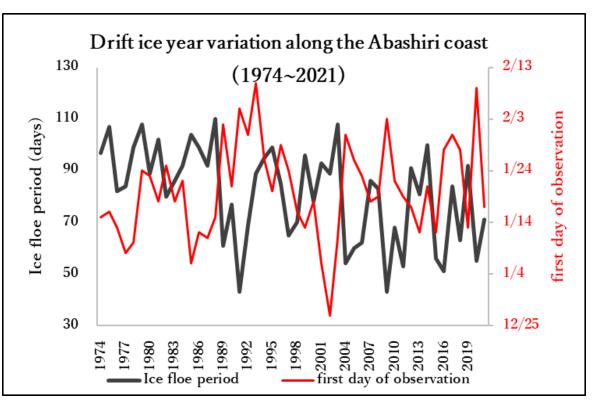
The Banya Built in Shiretoko Taken on 28 Oct, 2022

#### The environmental changes facing the…

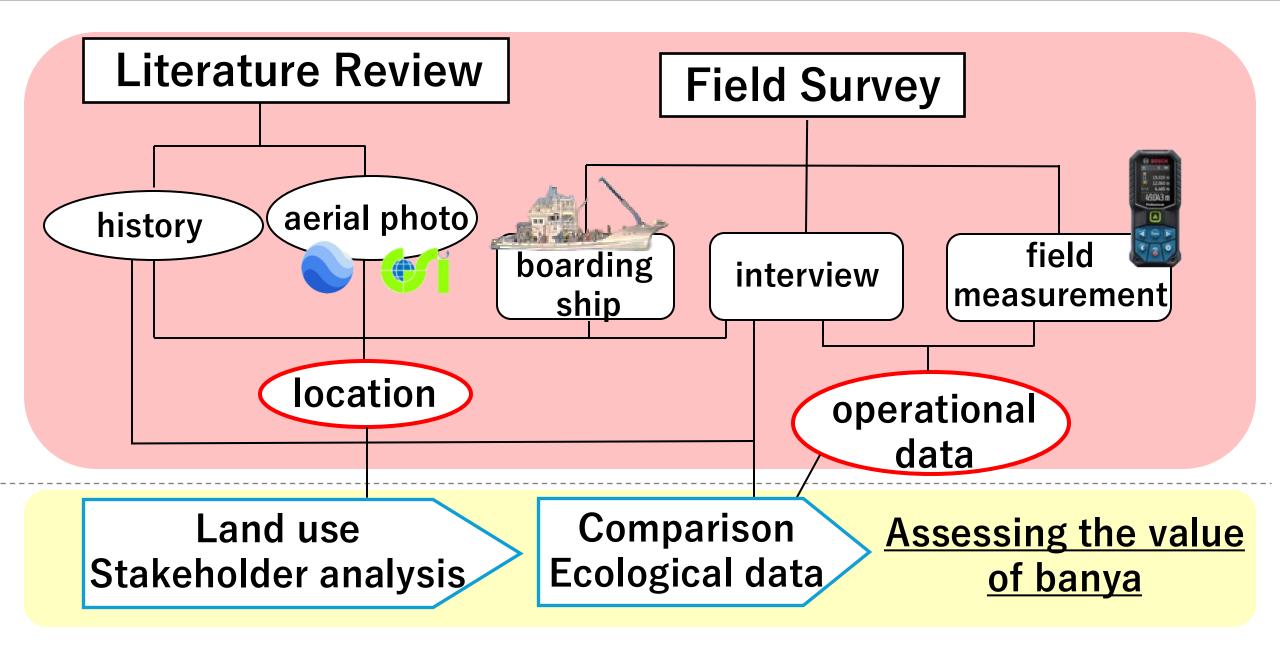
#### Fluctuations in salmonid stocks

#### Reduction trend of sea ice





"urgent need to clarify the impact of environmental changes on society" (Ministry of the Environment, Japan 2023)



### total 8 points (3: in use 5: abandonment)



Taken on 16 June, 2023



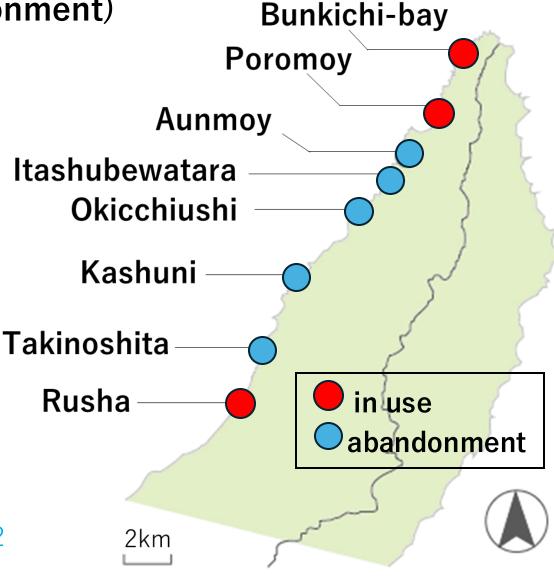
Taken on 28 Oct, 2022



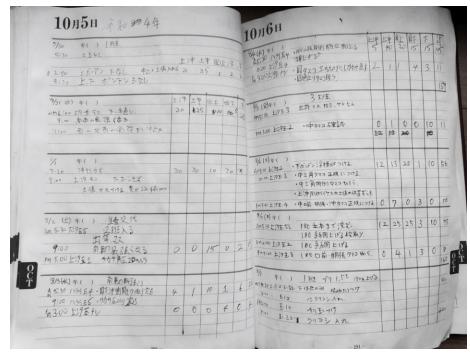
Taken on 17 June, 2023



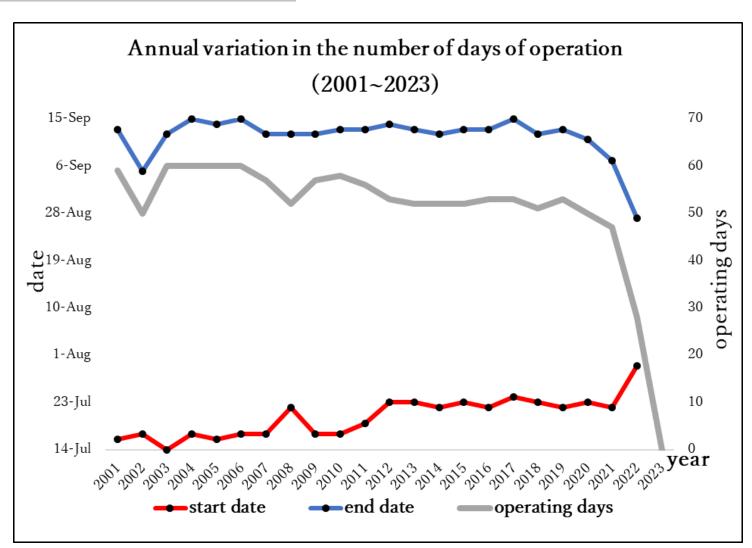
Taken on 17 June, 2022

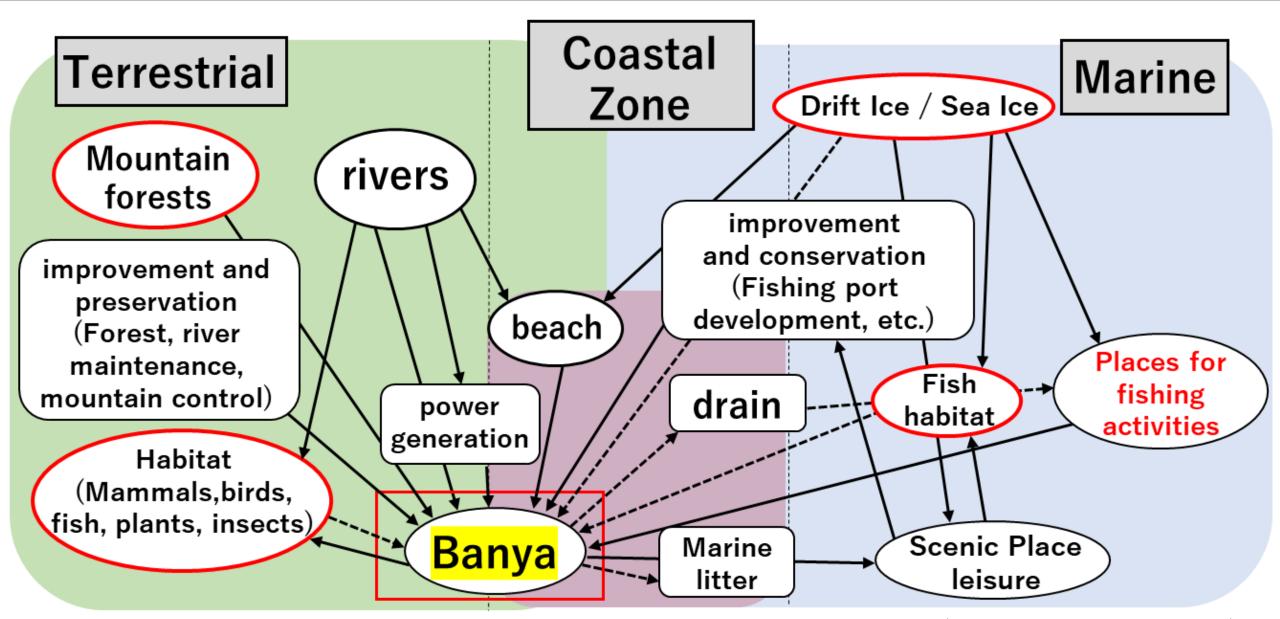


#### current usage status of banya



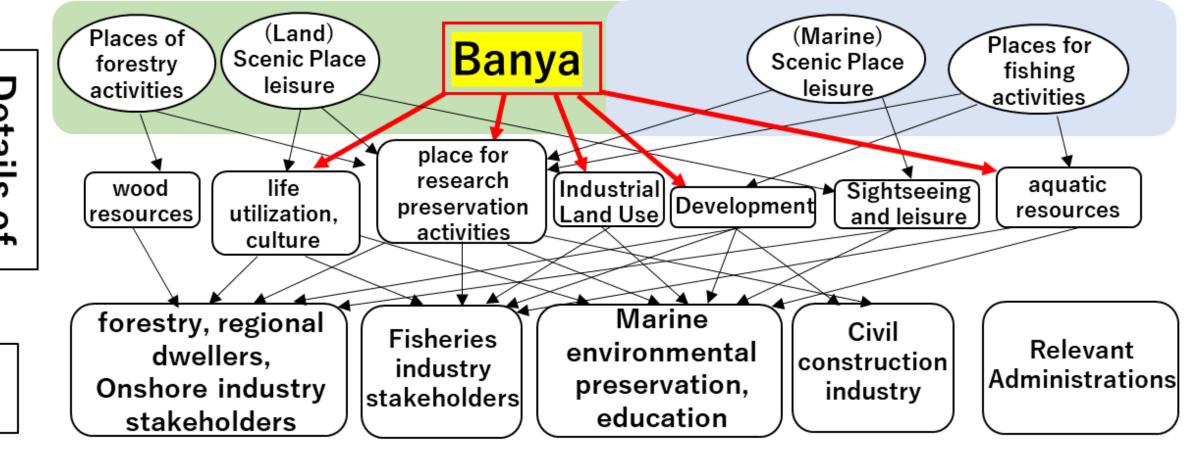
Taken on Oct, 25, 2023





Mandara-chart (Makino et al., 2020)

Introduction



There is a high likelihood that Banyas are exerting a positive impact on the human social system

Introduction

- 1. Some Banyas are still in use, but there is a high likelihood of decline in the future
- 2. Banyas are not only directly utilized by fishermen but can also serve as important resources
- 3. The coastal areas where Banyas are located, are crucial elements in maintaining the universal value of the Shiretoko WNH

managing the coastal areas, including Banya, could contribute to the conservation and preservation of Shiretoko's natural environment