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**Proposed Cruise Plans of Japanese Research Vessel for Salmon
in the North Pacific Ocean in 2020**

by

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Proposed Cruise Plans of Japanese Research Vessel for Salmon in the North Pacific Ocean in 2020

Abstract: One Japanese research vessel is scheduled to conduct three high-seas salmon surveys in 2020. The *Hokko maru* will carry out two salmon research survey in the western North Pacific Ocean between early June and early July. The *Hokko maru* will also carry out a summer monitoring survey for salmon and their habitat in the central Bering Sea during middle July to early August.

Keywords: Japanese cruise plan, high-seas salmon, monitoring survey, Bering Sea, North Pacific Ocean, 2020

Japanese research vessel (Appendix Table) are scheduled to conduct four scientific research cruises in the North Pacific Ocean and the Bering Sea in 2020 (Table 1).

- (1) The *Hokko maru* will carry out salmon research with surface and midwater trawls to survey of horizontal and vertical distribution pattern of Pacific salmon in the North Pacific Ocean in early June (Fig. 1).
- (2) The *Hokko maru* will conduct research with a surface trawl to estimate the abundance of Pacific saury, salmon, and other pelagic fishes in western North Pacific Ocean from middle June to early July (Fig. 2).
- (3) The *Hokko maru* will carry out salmon research with a surface trawl and hook-and-line to obtain information on the distribution, abundance, and other biological characteristic of Pacific salmon in the Bering Sea from middle July to early August (Fig. 3).

Table 1. Proposed cruise plan of Japanese research vessels for salmon in the North Pacific Ocean and Bering Sea in 2020.

Vessel	Period	Survey area	Research objects	Gears equipped
<i>Hokko maru</i>	June 3–June 9	Western North Pacific Ocean	Survey of horizontal and vertical salmon distribution patterns	Surface and midwater trawls
<i>Hokko maru</i>	June 13–July 1 (1 st cruise) July 3–July 10 (2 nd cruise)	Western North Pacific Ocean	Abundance of Pacific saury, salmon, and other peragic fishes	Surface trawl
<i>Hokko maru</i>	July 15–August 7	Bering Sea	Salmon abundance and distribution	Surface trawl, hook-and-line

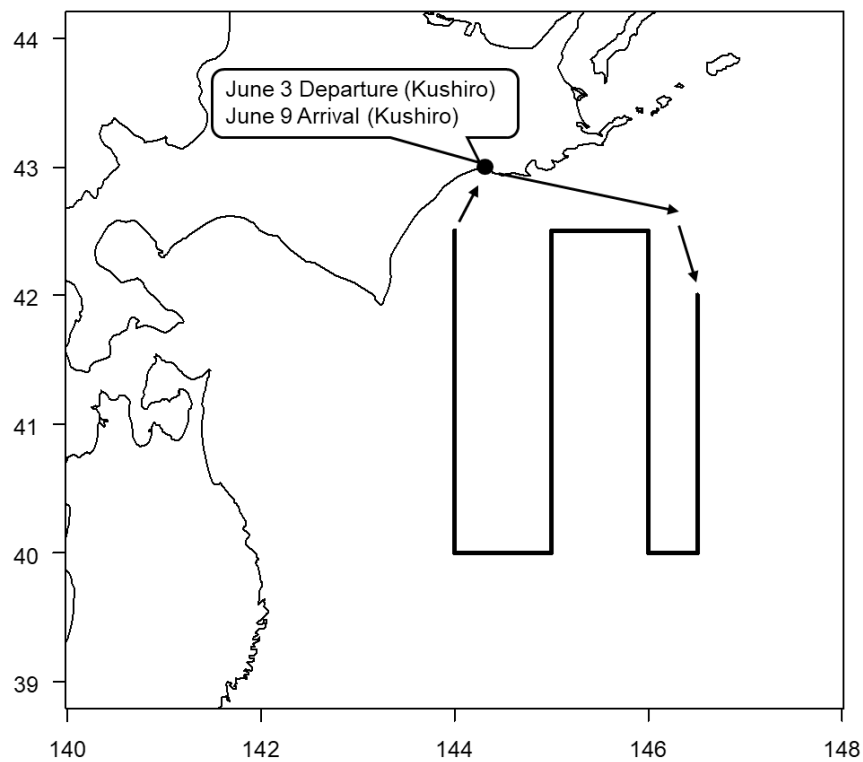


Fig. 1. Research area of the R/V *Hokko maru* in the western North Pacific Ocean, June 3–June 9, 2020.

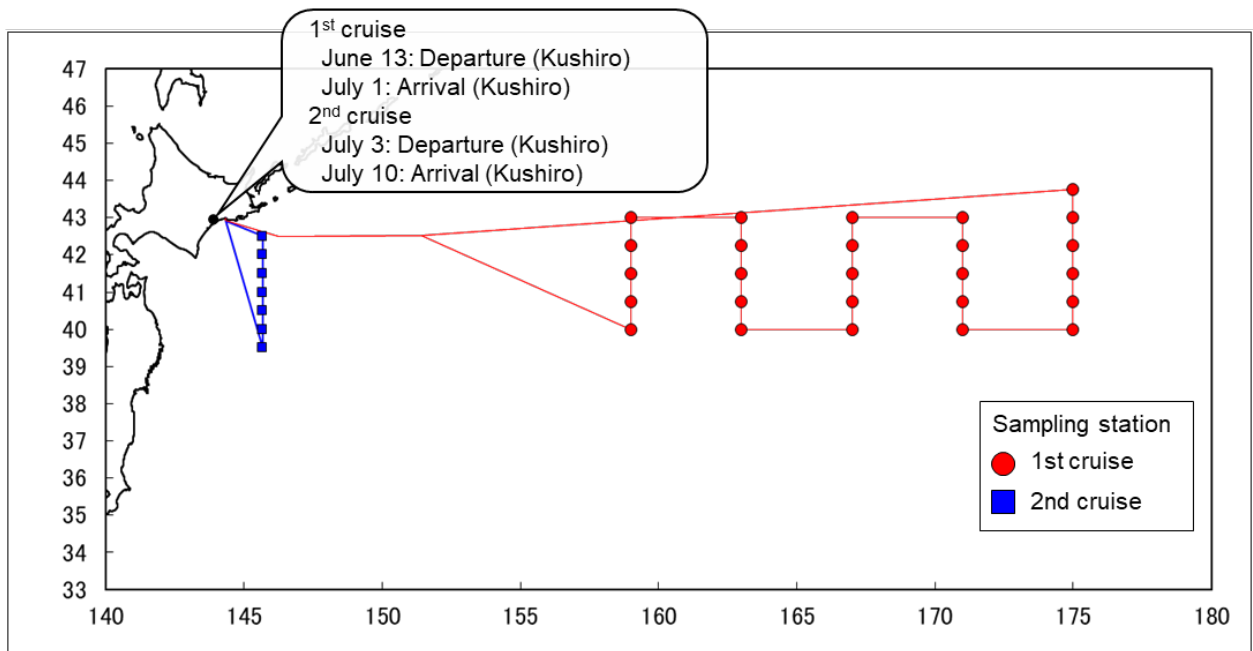


Fig. 2. Research area of the R/V *Hokko maru* in the western North Pacific Ocean, June 13–July 1 (1st cruise) and July 3–July 10 (2nd cruise), 2020.

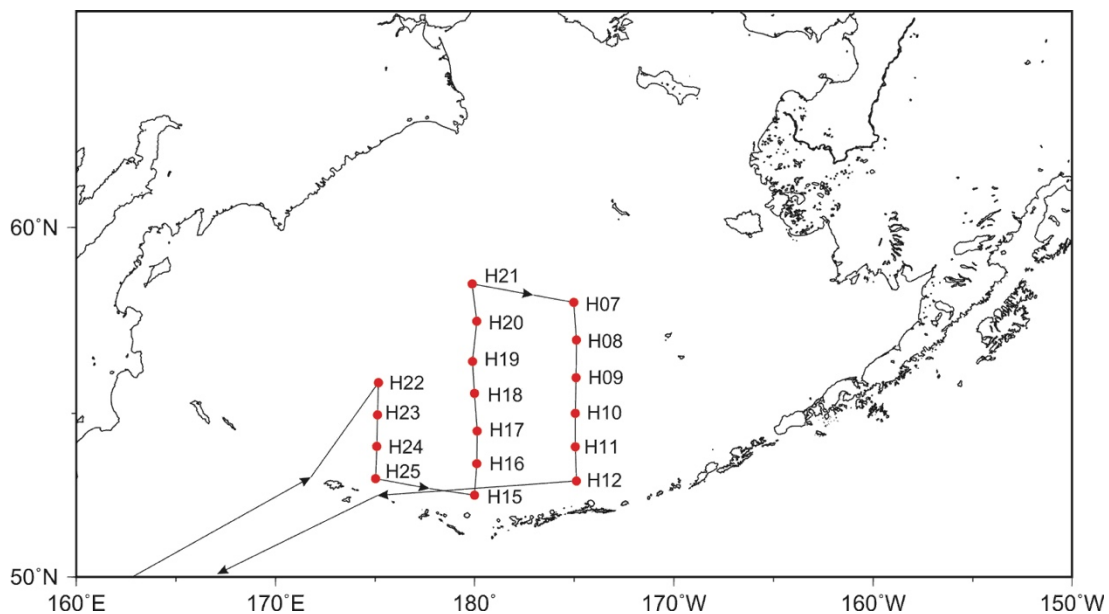


Fig. 3. A map showing 17 sampling stations in the Bering Sea by the R/V *Hokko maru*, July 15 (Kushiro)–August 7 (Kushiro), 2020.

Appendix Table. List of Japanese research vessel scheduled for high-seas salmon surveys in 2020.

Party	Vessel name	Call sign	Gears equipped	Other available information
Hokkaido National Fisheries Research Institute, FRA	<i>Hokkomaru</i>	JEBB	Surface and midwater trawls, hook-and-line	INMARSAT telephone: +872-7634-443-93 Length: 64.73 m Gross tonnage: 902