

Response to Gauvreau *et al.* 2017. ““Everything revolves around the herring”: the Heiltsuk–herring relationship through time”

## Response to: “Everything revolves around the herring”: the Heiltsuk-herring relationship through time. 2017. Gauvreau, A. M., D. Lepofsky, M. Rutherford, and M. Reid.

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Key Words: *Heiltsuk; herring; traditional ecological knowledge; fisheries management*

### INTRODUCTION

Since publishing our manuscript ““Everything Revolves Around the Herring”: the Heiltsuk-herring Relationship Through Time,” (Gauvreau *et al.* 2017); we have received considerable positive support from Heiltsuk community members who were not directly involved in the project. In the course of those discussions, we became aware of additional traditional ecological knowledge (TEK) about herring, additional western scientific data that corroborates with TEK reported in the manuscript, as well as a citation error that needs correcting. We outline these updates here.

### UPDATES

#### Management strategies: transplanting herring spawn and minimizing noise while harvesting

Since publication, we were made aware of an additional, important method of Heiltsuk traditional herring management. In addition to leaving herring eggs behind to hatch and ensure the perpetuation of the herring stocks (Table #3, Topic #7), the late Cyril Carpenter shared in an interview in 1997 the following about transplanting herring eggs:

*I'll tell you what, though, about transplanting [salmon], if the Heiltsuk used this common knowledge of transplanting herring eggs from where it normally returns to spawn, when they took enough, when they had a surplus, they would tow the trees to different locations to enlarge the spawning area. Beatrice Brown told me that story many times. They would enhance the herring when it first came to the BC coast, by that method. (Cyril Carpenter interview with Jim Jones, Oct. 15, 1997; housed in the Heiltsuk Culture and Education Centre, Bella Bella).*

Late Clarence Martin also spoke of Heiltsuk transplanting herring eggs by moving the branches with spawn to different locations (J. Carpenter, *personal communication*, May 1, 2017). As several community members have mentioned this practice and how it ensured herring abundance, it is likely that this method was common knowledge among Heiltsuk up until the recent past.

We also became aware of a scientific publication that corroborates Heiltsuk rules that one must remain quiet while harvesting herring roe from the spawning grounds (Table #3, Topic#10). In particular, Schwarz and Greer (1984) described the responses of

net-penned herring to a series of tape-recorded sounds. They note that herring changed their behavior (e.g., avoided, dispersed) in response to a range of noises, including the “sounds made by large vessels approaching at constant speed” and “sounds made by smaller vessels [...]but only when on accelerated approach” (Schwarz and Greer 1984:1189).

#### Citation erratum re: herring fish traps in Heiltsuk territory

Finally, in our results subsection “The Heiltsuk management system for Pacific herring” (page 7, paragraph 2), we discussed the different types of fish traps that were reportedly used by Heiltsuk First Nation to harvest herring and other species of fish. In that discussion, we incorrectly attributed some information to a Masters thesis by one Heiltsuk community member (White 2006) rather than to a Heiltsuk traditional fish trap report compiled by other community members (HCEC 2000).

*Responses to this article can be read online at:*

<http://www.ecologyandsociety.org/issues/responses.php/9542>

### LITERATURE CITED

Gauvreau, A., D. Lepofsky, M. Rutherford, and M. Reid. 2017. “Everything revolves around the herring”: the Heiltsuk–herring relationship through time. *Ecology and Society* 22(2):10. <https://doi.org/10.5751/ES-09201-220210>

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