

**ICHTHYOPHONUS, TAPEWORMS, NEMATODES  
AND OTHER PARASITES IN YUKON RIVER  
SALMON AND OTHER FISH**

A PowerPoint® presentation presented in Dawson City, Yukon, on August 19, 2006.

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Appreciation is expressed to the organizers of the Salmon Celebration in Dawson City, and for providing a venue for this presentation.

## **SUMMARY**

A professional PowerPoint® presentation, dealing primarily with a parasite of some concern to Yukon Chinook salmon fishers, was included as part of the Salmon Celebration in Dawson City, Yukon.

Conditions were somewhat less than optimal, and a major component of the presentation was omitted due to lack of fish specimens.

Some suggestions for improvement are included at the end of this report.

## INTRODUCTION

For the past few years, a parasite identified as *Ichthyophonus spp.* has been increasing in prevalence and severity in Chinook salmon returning to the upper Yukon River drainage for spawning.

This parasite, classified as a protozoan, can eventually make its way into the skeletal muscle, producing an non-aesthetic appearance and meat of poor quality.

There are other Yukon River salmon parasites that may resemble *Ichthyophonus*, and a few others that may be zoonotic (transferable from animals to humans). The presentation deals with these issues.

## METHODS, MATERIALS, RESULTS AND DISCUSSION

As part of a larger, end-of-summer festival held at Dawson City, Yukon, on August 19, a Salmon Celebration component was included. The *Ichthyophonus* presentation took place in the Salmon Celebration area, a large tent between Front Street and the Yukon River.

As part of the overall presentation, a fish dissection was scheduled in hopes that some actual fish parasites might be encountered, identified and discussed, and made available to participants for viewing under a dissecting scope. Unfortunately, the event organizers were unable to obtain suitable fish specimens for this purpose, so no dissection was performed. This was unfortunate, as a fish dissection is a very effective “crowd grabber”. It would have worked well to attract people with a dissection, and then launch into the PowerPoint presentation after catching the attention of the group. Virtually everyone, especially young people, find fish dissections almost mesmerizing. People love to watch them. This makes the dissection valuable in its own right, and also provides an efficient way to gather a crowd for the dissemination of additional information.

The presentation took place in a tent during the middle of the day. There was entirely too much light and inadequate set-up paraphernalia for screen viewing, and consequently it was impossible to view the projected images clearly on the screen.

As it turned out, the presentation was made to three people. One of the organizers “seeded” the crowd by being the only audience member when upon initiation of the presentation, and then gradually three other people wandered over. The organizer departed after things got going, leaving a group of three. The presentation was at some-

what of a disadvantage, as the very professional video produced by Al Code and funded by the Panel was running continuously. As they say, it was a tough act to follow.

## **RECOMMENDATIONS**

1. If the Panel wishes to continue with these presentations, it might be prudent to begin to establish an inventory of salmon and some other freshwater species. They could be collected at appropriate times during the year, frozen in the round, and then thawed prior to use. This would eliminate any dependence on other persons or organizations to supply fish, and would guarantee the desired number, size, species and condition of the specimens.
2. The PowerPoint presentation itself is professional and accurate. However, it has a very specific message and should be presented to a very targeted audience, i. e., commercial fishers, subsistence and First Nation fishers, etc. It does not seem entirely suitable for a "general interest" venue. The Salmon Celebration was just one small component of a much larger holiday festival going on that weekend, and the vast majority of the "walk-through" audience did not appear to be particularly interested in salmon parasites. Careful consideration should be given to the nature of the intended audience for the current presentation as it stands.
3. It would be worth considering the expansion of the current presentation into a more general "salmon health" or "salmon diseases" presentation, of which the current presentation would become a part.
4. Should the Panel wish to pursue the production of interpretive/educational presentations of this type, serious consideration should be given to the acquisition of suitable electronic equipment necessary to project a table top demonstration (fish dissection) onto a screen or through a television monitor. Likewise the PowerPoint presentation .... in this case, a television monitor would have been far superior for viewing purposes. This was no one's fault. This type of presentation just won't work in the light and without adjustable tables, etc.
5. If the Panel is going to continue with this program, it should, at a minimum, invest in a new projection screen. The one that was provided from Whitehorse was damaged, and proved to be very awkward and time consuming in setting up.

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