



Carter, Brinnen &lt;brinnen\_carter@nps.gov&gt;

---

**pink and chum salmon straying in Indian River 2017**5 messages

---

**Gende, Scott** <scott\_gende@nps.gov>

Wed, Oct 25, 2017 at 5:09 PM

To: Christopher Sergeant &lt;christopher\_sergeant@nps.gov&gt;, "Carter, Brinnen" &lt;brinnen\_carter@nps.gov&gt;, david elkowitz &lt;david\_elkowitz@nps.gov&gt;, Tom Quinn &lt;tquinn@u.washington.edu&gt;, Mike Tillotson &lt;mdt3@uw.edu&gt;

Hi All,

Thanks again for helping out sampling otoliths in the Indian River in late August. Fish were just starting to die so it was early in the run, although the density of live fish increasing. Based on previous years it looked like earlier running fish tended have a higher probability of being produced in the hatchery (strays) so was curious how this one would result.

I just checked the ADFG Mark Lab website (<https://mtalab.adfg.alaska.gov/OTO/reports/MarkSummary.aspx>) and the results for pinks are in: We collected 100 otoliths; 98 were readable. Of the 98, 77 had Sheldon Jackson hatchery marks, equating to a straying rate of 79%.

Believe it or not, that was actually low compared to the chums, which we collected (opportunistically) 26 pairs of otoliths collected, 25 were readable. Of those readable, 24 were marked equating to 96% of chums in the river were of hatchery origin.

Given that they are ramping up chum production, the ability of chums to move gravel, we need to think about the future.

I'm waiting to get the otoliths from Brinnen who sampled again later in the run. I'll send out those results when we get them back from the lab.

Hoping this fall to move forward with the project of modeling natural range of variation for pinks in the Indian River watershed. Maybe we could have further discussions on that in the next month or so.

Scott

--

Scott M. Gende, Ph.D.  
Senior Science Advisor  
Glacier Bay Field Station  
[3100 National Park Road,](#)  
[Juneau, AK 99801](#)  
907-364-2622 (office); 907-364-2606 (fax)

---

**Carter, Brinnen** <brinnen\_carter@nps.gov>

Wed, Oct 25, 2017 at 5:16 PM

To: "Gende, Scott" &lt;scott\_gende@nps.gov&gt;

Cc: Christopher Sergeant &lt;christopher\_sergeant@nps.gov&gt;, david elkowitz &lt;david\_elkowitz@nps.gov&gt;, Tom Quinn &lt;tquinn@u.washington.edu&gt;, Mike Tillotson &lt;mdt3@uw.edu&gt;

Scott,

Thanks for the update on the pink and chum straying. It confirms what I suspected beginning last year when we had weak pink return and chums dominated the reach within the park. I am concerned at this point that geometric increases in chum returns to the river (as seen with pinks) will accelerate physical erosion within the park due to their ability to move small gravel. Need to get on top of this, fast.

Brinnen

9/26/2019

DEPARTMENT OF THE INTERIOR Mail - pink and chum salmon straying in Indian River 2017

Brinnen Carter, Ph.D.  
Chief of Resources, Sitka National Historical Park  
103 Monastery St., Sitka, AK 99835  
907-738-4960

=====  
Any statement above relating to the management  
and care of NPS resources is my professional opinion.

=====  
The higher one goes in life, and especially in government,  
the greater the capacity for self-delusion.  
-- George J. Mitchell (4/3/13 on Charlie Rose)  
=====

[Quoted text hidden]

---

**Thomas P. Quinn** <tquinn@uw.edu>

Wed, Oct 25, 2017 at 6:53 PM

To: "Gende, Scott" <scott\_gende@nps.gov>

Cc: Christopher Sergeant <christopher\_sergeant@nps.gov>, "Carter, Brinnen" <brinnen\_carter@nps.gov>, david elkowitz <david\_elkowitz@nps.gov>, Tom Quinn <tquinn@u.washington.edu>, Mike Tillotson <mdt3@uw.edu>

Scott,

Thanks a lot for sharing these results. Wow. Were the chums from Sheldon Jackson or any from elsewhere? I'll be most interested to see what variation there might be over the course of the season.

Mike is moving along on his analysis of wild and hatchery-origin sockeye salmon in the Cedar River and selection on spawning timing in the hatchery. If you are interested we can circulate it and comments would be welcome. Keep us posted as this is of considerable interest.

best wishes to the family,  
Tom

Chris, Brinnen, and David,  
Thanks again for giving Mike and myself a chance to see this interesting system and hack a few heads with you in the cause of science,  
Tom

[Quoted text hidden]

--

Thomas P. Quinn  
School of Aquatic & Fishery Sciences  
University of Washington  
<http://salmonscience.washington.edu/>

---

**Michael Tillotson** <mdt3@uw.edu>

Thu, Oct 26, 2017 at 7:38 AM

To: "Thomas P. Quinn" <tquinn@uw.edu>

Cc: "Gende, Scott" <scott\_gende@nps.gov>, Christopher Sergeant <christopher\_sergeant@nps.gov>, "Carter, Brinnen" <brinnen\_carter@nps.gov>, david elkowitz <david\_elkowitz@nps.gov>, Tom Quinn <tquinn@u.washington.edu>

Thanks for the update Scott. The high proportion of hatchery chums is certainly troubling given the future plans for production.

[Quoted text hidden]

--

Mike Tillotson, Master of Marine Affairs

PhD Candidate  
University of Washington  
School of Aquatic and Fishery Sciences  
IGERT Program on Ocean Change

---

**Sergeant, Christopher** <christopher\_sergeant@nps.gov>

Thu, Oct 26, 2017 at 11:54 AM

To: Michael Tillotson <mdt3@uw.edu>

Cc: "Thomas P. Quinn" <tquinn@uw.edu>, "Gende, Scott" <scott\_gende@nps.gov>, "Carter, Brinnen" <brinnen\_carter@nps.gov>, david elkowitz <david\_elkowitz@nps.gov>, Tom Quinn <tquinn@u.washington.edu>

9/26/2019

DEPARTMENT OF THE INTERIOR Mail - pink and chum salmon straying in Indian River 2017

Hi All,

Wow, Scott, those are some high numbers! Thanks for the update. I'm happy to participate in any discussion of the modeling project.

Cheers,  
Chris

--

Ecologist - National Park Service - Inventory & Monitoring Program  
Southeast Alaska Network - [3100 National Park Road, Juneau, AK 99801](#)  
Office: (907) 364-1591 - Cell: (907) 500-4540

[SEAN Website](#) and [My ResearchGate](#)

I am currently working 30 hours per week. I apologize for any delayed response to your message.  
[Quoted text hidden]