

Fraser River Sturgeon Conservation Society
Contributions to Sturgeon Stewardship



White Sturgeon (*Acipenser transmontanus*)
the sturgeon from “across the mountains”



Fraser River Sturgeon Conservation Society *Contributions to Sturgeon Stewardship*



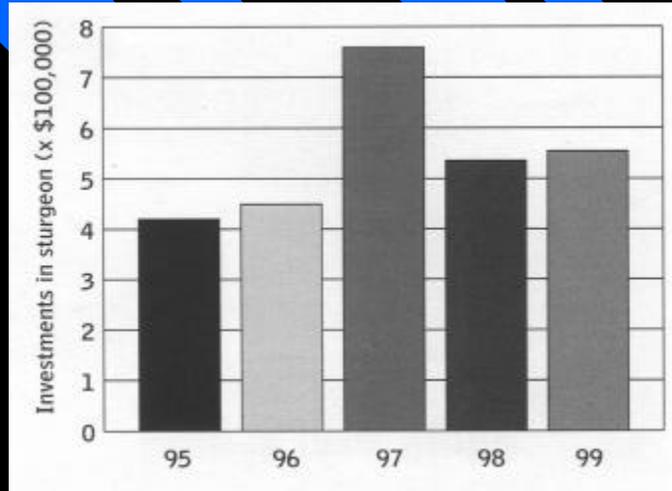
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Recent Events

- Mid 1900s: annual by-catch of 20,000 kg in salmon net fisheries
- Late 1980s: annual sport catch of 4,000 and kill of 900
- Die-offs in 1993-94 (34 fish recovered)
- Tested for PCBs, 23 organochlorines, 19 heavy metals, dioxins, furans
- Cause of deaths--unknown



Provincial Response: Fraser River Sturgeon Program 1995-99 Investments in Sturgeon - \$2.7 million



Provincial Fraser River Sturgeon Program 1995-99

Population Estimates and Data

- Fraser Canyon (Hope to Yale): 1,000
- Hope and Mission: 6,000-64,000 (17,000)
- Mission to Steveston ??
- 20 white sturgeon larvae and 2 embryos collected in side channels near Herrling Island and Minto Channel (Chilliwack)
- Age-length relationship ($n=1020$)



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FRSCS -- Filling a Niche

- Fraser River Sturgeon Conservation Society formed in 1998 by Rick Hansen and concerned anglers/conservationists
- Board includes a provincial and a federal fisheries biologist, commercial and First Nation fishermen, a marine supply specialist, an angling guide, fish conservationists, tackle shop owner



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Vision

“To ensure sturgeon populations in the Fraser River are strong, healthy and sustainable for future generations.”



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Mission

To conserve and restore Fraser River sturgeon by:

- Conducting research relating to Fraser River sturgeon and to disseminate the results
- Educating and increasing the public's understanding of Fraser River sturgeon



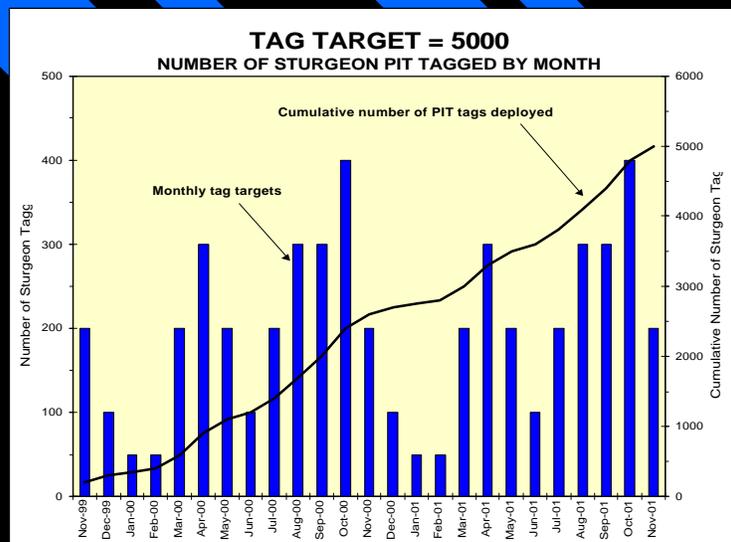
Fraser River Sturgeon Conservation Society 1999-2002 Tagging Program

1999-2002 Project Objectives

- To produce an estimate of the numbers of sturgeon in the lower Fraser (downstream of Hope)
- To produce reliable information on seasonal abundance of sturgeon, by location
- To produce information on seasonal migration & movement patterns of sturgeon
- To increase public awareness of the conservation and preservation of white sturgeon



Fraser River Sturgeon Conservation Society 1999-2002 Tagging Program



Fraser River Sturgeon Conservation Society
1999-2002 Tagging Program

1999-2002 Sponsors

- Ministry of Fisheries
- Habitat Conservation Trust Fund
- Fisheries Renewal BC
- Environment Canada - Species at Risk Program
- Canadian National Sportsmen's Shows
- Vancouver Port Authorities
- Vancouver Foundation
- Endswell Foundation



Fraser River Sturgeon Conservation Society
1999-2002 Tagging Program

Elements of Success & Achievement

- Leadership
- Scientific protocol
- Volunteer participation
- Public awareness



Fraser River Sturgeon Conservation Society
1999-2002 Tagging Program



Leadership

- Bringing together government and NGOs
- Teamwork approach (sharing responsibility & accomplishments)
- Professional project management (LGL Limited)



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1999-2002 Tagging Program



Scientific Protocol

- Research field techniques and analytical methods
- Technical review
- Implementation – training
- Quality assurance
- Data management & security



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Volunteer Participation



- Identifying key volunteers/groups
- Professional volunteer training/support
- Volunteer feedback & communication



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Project Volunteers



- Angling guides and clients
- “Select” anglers
- Test Fisheries (Albion & Whonnock)
- Aboriginal Fisheries Officers
- Aboriginal fishermen and catch monitors (Yale, Lakahahmen, Katzie, Musqueam, Tsawwassen)
- Selective fisheries (tangle-net, fishwheel)
- DFO catch monitors & charter patrolmen
- In-kind labor of 100-plus volunteers



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Public Awareness



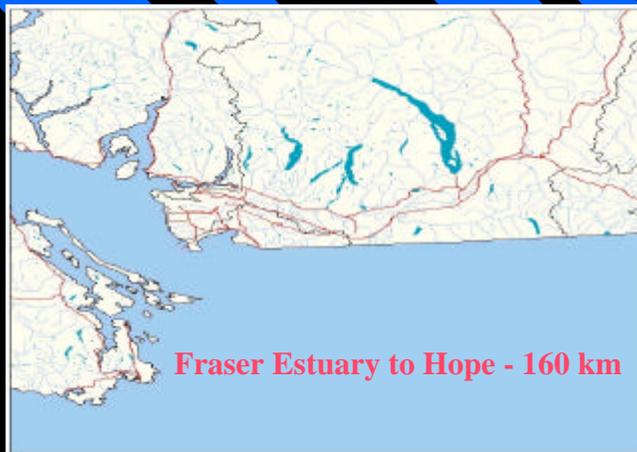
CKNW, VTV, BCTV, Global TV, *Sun, Province*, CBC (national, local), Rogers, BC Outdoors, GreaterVancouver.com, *Record, Richmond News, Langley Advance*, Westland, Rivard Productions, Shelly & Courtney Show, Numerous articles, media releases, talks (BC Aboriginal Fisheries Commission, Port Authorities, Naturalists, BCWF)



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STUDY AREA

Lower Fraser River - Estuary to Hope



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PIT Tag Application

Matches location used in Columbia (OR, WA)



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Mark-Recapture

Scanning for the presence of a PIT Tag



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Biosampling

- Nose-fork length
- Girth
- DNA sample
 - fin clip
 - below Mission
 - University of Victoria



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2000 Fraser First Nations Involvement

- **Yale**
Sampling by fisheries monitors
- **Lakahahmen**
Floating Cage
(Sumas River Mouth)
- **Katzie**
Sturgeon provided to
DFO Charter Patrolmen
for sampling and tagging
- **Musqueam**
Sampling and tagging by AFOs
- **Tsawwassen**
Sampling and tagging by AFOs

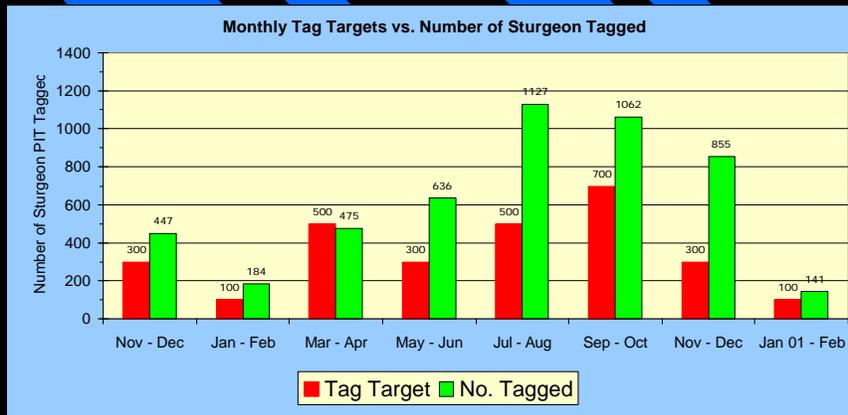


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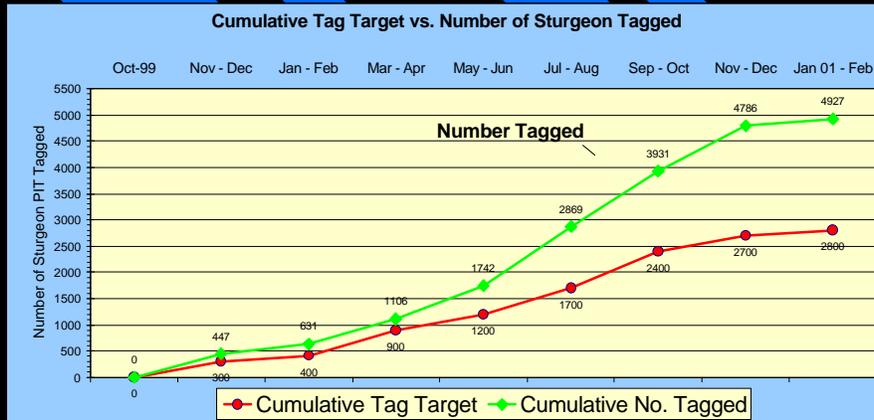
Fraser First Nations Involvement
Lakahahmen Band - Sumas River Mouth 2000



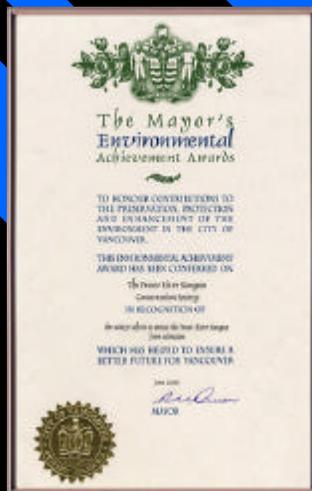
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Fraser River Sturgeon Conservation Society Contributions to Sturgeon Stewardship



Fraser River Sturgeon Conservation Society *Contributions to Sturgeon Stewardship*

Future Activities



- Provide Leadership
- Initiate Key Projects
- Promote Public Awareness
- Respond to Current Issues
- Enhance Stewardship



Fraser River Sturgeon Conservation Society *Future Activities*

Provide Leadership



- Partner and share information with government and NGOs
- Continue identifying, reviewing, and addressing issues important to the protection and conservation of Fraser River sturgeon



Fraser River Sturgeon Conservation Society Future Activities

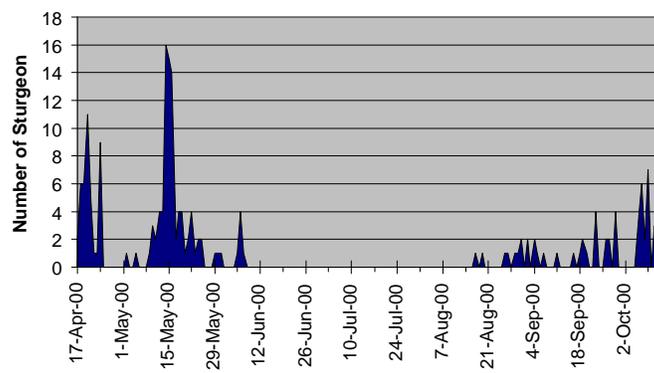
Initiate Key Projects

- Increase Tag-Recapture Activities in the Fraser Estuary
- Juvenile Rearing and Habitat
- Telemetry Study of Migration Patterns and Habitat Use
- Establish Monitoring Program



Fraser River Sturgeon Conservation Society Future Activities

Albion Test Fishery - Sturgeon Catch 2000



Fraser River Sturgeon Conservation Society Future Activities

Promote Awareness

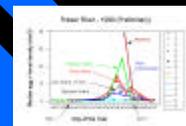


- Continue using media to report on sturgeon issues
- Special focus on poaching
- Annual fundraising & social event
- Provide speakers and public presence



Fraser River Sturgeon Conservation Society Future Activities

Responding to Current Issues



- Oolichan concerns (test fishery support)
- Member of Pitt River and Area Watershed Network
- First Nations liaison
- Enhanced awareness of potential impacts of industrial activities (speech to Port Authorities)



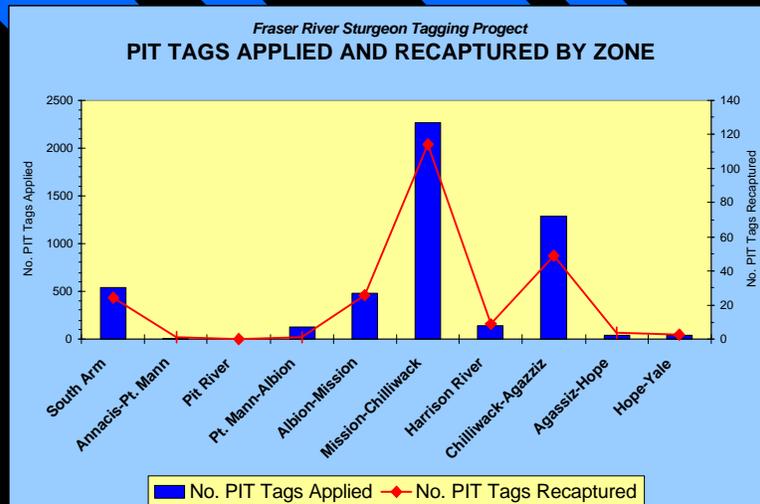
Fraser River Sturgeon Conservation Society Future Activities

Enhance Stewardship

- Increase First Nations involvement in year 2 of the tagging project
- Encourage, direct, and support volunteers
- Promote “Sturgeon Watch”/enforcement



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