

## Published Research

### Peer Reviewed Articles

- Carr, J.W., Anderson J.M., Whoriskey, F.G. & Dilworth T. 1997. The occurrence and spawning of cultured Atlantic salmon (*Salmo salar*) in a Canadian river. – ICES Journal of Marine Science, 54: 1064-1073.
- Carr, J.W., Hammond, G.E., Ambali, A.J.D & Anderson, J.M. 1997. The Magaguadavic River as an index river for interactions between wild and aquaculture Atlantic salmon. – AAC Special Publication No. 2, 74-76.
- Carr, J.W., Lacroix, G.L., Anderson, J.M. & Dilworth T. 1997. Movements of non-maturing cultured Atlantic salmon (*Salmo salar*) in a Canadian river. – ICES Journal of Marine Science, 54: 1082-1085.
- Carr, J.W. 1999. Atlantic Salmon (*Salmo salar* L.) smolt migration patterns in the dam-impacted St. John River system. –Habitat Restoration and Enhancement, 217-227.
- Whoriskey, F. G. & Carr, J.W. 2001. Returns of transplanted adult, escaped, cultured Atlantic salmon to the Magaguadavic River, New Brunswick. –ICES Journal of Marine Science, 58:504-509.
- Carr, J.W. & Whoriskey, F.G. 2004. Sea lice infestation rates on wild and escaped Atlantic salmon (*Salmo salar* L.) entering the Magaguadavic River, New Brunswick. Aquaculture Research 35: 723-729.
- Carr, J.W., Whoriskey, F.G. & O'Reilly, P 2004. Efficacy of releasing captive reared broodstock into an imperilled wild Atlantic salmon population as a recovery strategy. Journal of Fish Biology 65(Supplement A): 38-54.
- Carr, J.W., Whoriskey, F.G. & Courtemanche, D. 2004. Landlocked Atlantic salmon: movements to sea by a putative freshwater life history form. Aquatic telemetry: advances and applications, 141-150.
- Whoriskey, F.G. Brooking, P., Doucette, G., Tinker, S., & Carr. J.W. 2005. Movements and survival of sonically tagged farmed Atlantic salmon released in Cobscook Bay, Maine, USA. ICES Journal of Marine Science, 63: 1218-1223.
- Carr, J.W. & Whoriskey, F.G. 2006. The escape of juvenile farmed Atlantic salmon from hatcheries into freshwater streams in New Brunswick, Canada. ICES Journal of Marine Science, 63: 1263-1268.
- O'Reilly, P.T., Carr, J.W., Whoriskey, F.G. & Verspoor, E. 2006. Detection of European ancestry in escaped farmed Atlantic salmon, *Salmo salar* L., in the Magaguadavic River and Chamcook Stream, New Brunswick, Canada. ICES Journal of Marine Science, 63: 1256- 1262.
- Whoriskey, F.G., Brooking, P., Doucette, G., Tinker, S. & Carr, J.W. 2006. Movements and survival of sonically tagged farmed Atlantic salmon released in Cobscook Bay, Maine, USA. ICES Journal of Marine Science, 63: 1218-1223.

- Carr, J.W. & Whoriskey, F.G. 2008. Migration of silver American eels past a hydroelectric dam and through a coastal zone. *Fish. Manag. Ecol.* 15: 393-400.
- Morris, M.R.J., Fraser, D.J., Heggelin, A.J., Whoriskey, F.G., Carr, J.W., O'Neil, S.F. & Hutchings, J.A. 2008. Prevalence and recurrence of escaped farmed Atlantic salmon (*Salmo salar*) in eastern North American rivers. *Can. J. Fish. Aquat. Sci.* 65: 2807-2826.
- Bradford, R.G., Carr, J.W., Page, F.H. & Whoriskey, F. 2009. Migration of Silver American Eels Through a Macrotidal Estuary and Bay. *Amer. Fish. Soc. Symp.* 69: 18pp.
- Carr, J.W. & Whoriskey, F.G. 2009. Atlantic Salmon (*Salmo salar*) and Smallmouth Bass (*Micropterus dolomieu*) Interactions in the Magaguadavic River, New Brunswick. DFO Can. Sci. Advis. Sec. Res. Doc. 2009/074. iv + 10pp.
- Bourett, V, O'Reilly, P.T, Carr, J.W, Berg, P.R & Bertatchez, L. 2011. Temporal change in genetic integrity suggest loss of local adaptation in a wild Atlantic salmon (*Salmo salar*) population following genetic introgression by farmed escapees. *Heredity* 106:500-510.
- Cote, D. Fleming, I.A., Carr, J.W. and McCarthy, J.H. In Press. Ecological Impact Assessment of the Use of European Origin Atlantic Salmon in Newfoundland Aquaculture Facilities. DFO Can. Sci. Advis. Sec. Res. Doc. 2015/073. v +28 p.
- Strom, J., Thorstad, E.B., Chafe, G., Sorbye, S.H. Righthon, D., Rikardsen, A.H. and Carr, J. 2017 Ocean migration of pop-up satellite archival tagged Atlantic salmon from the Miramichi River in Canada. – *ICES Journal of Marine Science*, doi:10.193/icesjms/fsw220.
- Daniels, J., Chaput, G., Carr, J. Can J. 2018. Estimating consumption rate of Atlantic salmon smolts (*Salmo salar*) by striped bass (*Morone saxatilis*) in the Miramichi River estuary using acoustic telemetry. *Fish. Aquat. Sci* 75:1811-1822.
- Chaput, G., Carr, J., Daniels, J., Tinker, S., Jonsen, I., Whoriskey, F. 2018. Atlantic Salmon (*Salmo salar*) smolt and early post-smolt migration and survival inferred from multi-year and multi-stock acoustic telemetry studies in the Gulf of St. Lawrence northwest Atlantic. *ICES Journal of Marine Science*, doi:10.193/icesjms/fsy156.
- Brunsdon, E., Daniels, J., Hanke, A., and Carr, J. 2019. Tag retention and survival of Atlantic salmon (*Salmo salar*) smolts surgically implanted with dummy acoustic transmitters during the transition from fresh to salt water. – *ICES Journal of Marine Science*, doi:10.193/icesjms/fsz139, 10 pp.
- Daniels, J., Sutton, S., Webber, D., and Carr, J. 2019. Extent of predation bias present in migration survival and timing of Atlantic salmon smolt (*Salmo salar*) as suggested by a novel acoustic tag. *Anim Biotelemetry* 7/16 (2019) doi:10.1186/s40317-019-0178-2, 11 pp.
- Strom, J., Campana, S., Righton, D., Carr, J., Aarestrup, K., Stokesbury, M., Gargan, P., Javierr and Thorstad, E. 2019. Ocean Predation and Mortality of Adult Atlantic Salmon. *Scientific Reports* 9. No.1 (December 2019): 7890. <https://doi.org/10.1038/s41598-019-44041-5>.

Roloson, S.D., Landsman, S., Tana, R., Hicks., Carr, J, Whoriskey, F., and VanDen Heuvel, M.R. 2020 "Otolith Microchemistry and Acoustic Telemetry Reveal Anadromy in Non-Native Rainbow Trout (*Oncorhynchus Mykiss*) in Prince Edward Island, Canada. Canadian Journal of Fisheries and Aquatic Sciences 77, no.7 (July 2020): 1117-30. <https://doi.org/10.1139/cjfas-20190229>.

Teffer, Amy K., Carr, J., Tabata, A., Schulze, A., Bradbury, I., Deschamps, D., Gillis, C.A., Brunson, E.B., Mordecai, G., and Miller, K.M. 2020. A Molecular Assessment of Infectious Agents Carried by Atlantic Salmon at Sea and in Three Eastern Canadian Rivers, Including Aquaculture Escapees and North American and European Origin Wild Stocks. FACETS 5, no. 1 (January 1, 2020): 234-63. <https://doi.org/10.1139/facets-2019-0048>.

Carr, J., Kocik, J., and Edwards, P. 2020. Report of the Telemetry and Atlantic Salmon Workshop: Next Steps from Estuary to the North Atlantic Ocean. Canadian Manuscript Report of Fisheries and Aquatic Sciences 3208.vi + 25p. [http://publications.gc.ca/collections/collection\\_2020/mpo-dfo/Fs97-4-3208-eng.pdf](http://publications.gc.ca/collections/collection_2020/mpo-dfo/Fs97-4-3208-eng.pdf).

Quinn B., Trudel M., Wilson B., Carr J., Daniels J., Haigh S., Hardie D., Hawkes J., McKindsey C., O'Flaherty-Sproul M., Simard É., and Page F. 2021. *Modelling the effects of currents and migratory behaviours on the dispersal of Atlantic salmon (Salmo salar) post-smolts in a coastal embayment*. Canadian Journal of Fisheries and Aquatic Sciences. 79(12): 2087-2111. <https://doi.org/10.1139/cjfas-2021-0316>

Daniels, J., Brunson, E.B., Chaput, G., Dixon H. J., Labadie H., Carr J. 2021. *Quantifying the effects of post-surgery recovery time on the migration dynamics and survival rates in the wild of acoustically tagged Atlantic Salmon Salmo salar smolts*. 2021. Animal Biotelemetry 9, 6 <https://doi.org/10.1186/s40317-020-00228-6>.

### **Technical Reports**

Carr, J. 1997. Downstream movements of presmolt in the Tobique River: 1996 tracking summary, Atlantic Salmon Federation: 74pp.

Carr, J.W. 1998. Initial Results: 1997 Downstream Movement of Presmolt in St. John River Drainage. Atlantic Salmon Federation: 4pp.

Carr, J.W. & Whoriskey, F.G. 1998. Atlantic salmon (*Salmo salar*) in the Magaguadavic River New Brunswick 1992-1997. Atlantic Salmon Federation: 45pp.

Whoriskey, F.G., Carr, J.W., Lacroix, G.L. & Stokesbury, M. 1998. A review and update of aquaculture impact studies carried out on the Magaguadavic River, Southern Bay of Fundy, New Brunswick. Presented at a Dept. of Fisheries & Oceans Workshop On Interactions of Wild & Farmed Atlantic Salmon Moncton, NB, 1998: 49pp.

Whoriskey, F. G. & Carr, J.W. 1999. Homing of escaped aquaculture Atlantic salmon to the Magaguadavic River, New Brunswick. Atlantic Salmon Federation, 12pp.

Carr, J.W. & Whoriskey, F.G. 2000. A review of aquaculture impact studies carried out on Southwestern New Brunswick outer Bay of Fundy Rivers, with emphasis on the Magaguadavic River. Atlantic Salmon Federation, 57pp.

- Carr, J.W. 2000. Summary of Downstream Migration of Juvenile Salmon in the Tobique River System, 1999- Atlantic Salmon Federation, 4pp.
- Carr, J.W. 2001. A review of downstream movements of juvenile Atlantic salmon (*Salmo salar*) in the dam-impacted Saint John River drainage. Atlantic Salmon Federation, 85pp.
- Carr, J.W. 2001. Downstream Migration of Juvenile Salmon in the Tobique River System 2000 Summary Report. Atlantic Salmon Federation, 5pp.
- Whoriskey, F. G. & Carr, J.W. 2001. Interactions of escaped farmed salmon, and wild salmon, in the Bay of Fundy region. Atlantic Salmon Federation, 11pp.
- Carr, J.W. & Whoriskey, F.G. 2002. Assessment of Atlantic salmon in Southwestern New Brunswick outer Bay of Fundy Rivers, with emphasis on the Magaguadavic River, 1992-2001 project report. Atlantic Salmon Federation, 46pp.
- Carr, J.W. 2002. Western Fundy Atlantic Salmon Recovery Program, Progress Report October 2002. Atlantic Salmon Federation, 2pp.
- Whoriskey, F. G., O'Reilly, P., & Carr, J.W. 2002. Reversal of the recent decreasing trend of escaped farmed Atlantic salmon entering the Magaguadavic River, New Brunswick, Canada, and genetic evidence for the presence of escaped juvenile and adult farmed salmon of European ancestry. Atlantic Salmon Federation and Department of Fisheries and Oceans, 11pp.
- Carr, J.W. & Whoriskey, F.G. 2003. 'Rearing Magaguadavic Broodstock at Huntsman Marine Science Center' Final Report. Atlantic Salmon Federation, 5pp.
- Carr, J.W. & Whoriskey, F.G. 2003. Western Fundy Atlantic Salmon Recovery Program Final Report. Atlantic Salmon Federation, 34pp.
- Carr, J.W. & Whoriskey, F.G. 2003. Magaguadavic River Monitoring and Recovery Program. Atlantic Salmon Federation, 24pp.
- Carr, J.W. & Whoriskey, F.G. 2004. Restoration of Western Fundy Atlantic Salmon- Project Report. Atlantic Salmon Federation, 46pp.
- Carr J.W. 2004. Feasibility of using landlocked salmon in anadromous salmon recovery program. Atlantic Salmon Federation, 34pp.
- Carr, J.W. & Whoriskey, F.G. 2005. Fish Passage Effects Monitoring Program for St. George Hydroelectric Redevelopment. Atlantic Salmon Federation, 25pp.
- Carr, J.W. 2005. Restoration of Western Fundy Atlantic Salmon- Final Report. Atlantic Salmon Federation, 34pp.

- Carr, J.W. 2006. Status of rainbow trout in New Brunswick watercourses. Atlantic Salmon Federation, 47pp.
- Carr, J.W. 2006. Multi Species Recovery Program with emphasis on Atlantic salmon- Final Report. Atlantic Salmon Federation, 34pp.
- Carr, J.W. 2008. Magaguadavic River Anadromous Fish Restoration and Monitoring Program. Atlantic Salmon Federation, ETF and NBWTF Final Report. 36pp
- Carr, J.W. 2009. Outer Bay of Fundy Atlantic Salmon and Alewife Recovery Program. Project No. F308-037. Submitted to the New Brunswick Wildlife Trust. 26pp.
- Carr, J.W. 2010. At Sea Interactions of Atlantic Salmon Kelt and Smolt from Bay of Fundy Region. Project No. F309-026. Submitted to the New Brunswick Wildlife Trust. 19pp.
- Carr, J.W. 2011. Salmon Smolt Tracking and Assessment. Submitted to the Atlantic Salmon Conservation Foundation. 9pp.
- Carr, J.W. 2010. 2009 Summary Report on Monitoring Times, Locations, and Fish Handling in Outer Bay of Fundy Rivers. License 322376. Submitted to Department of Fisheries and Oceans. 6pp.
- Carr, J.W. 2010. Magaguadavic River Exotic Fish Species Inventory and Public Awareness. Project No. F309-050. Submitted to the New Brunswick Wildlife Trust. 2pp.
- Carr, J.W. 2011. 2010 Summary Report on Monitoring Times, Locations, and Fish Handling in Outer Bay of Fundy Rivers. License 322376. Submitted to Department of Fisheries and Oceans. 5pp.
- Carr, J.W. 2011. Magaguadavic River Recovery Program. No. F300-031. Submitted to the New Brunswick Wildlife Trust. 6pp.
- Carr, J.W. 2012. Salmon Smolt Tracking and Assessment. Submitted to the Atlantic Salmon Conservation Foundation. 12pp.
- Carr, J.W. 2013. ASF Tracking Research – 2013. Submitted to the Atlantic Salmon Conservation Foundation. 10pp.
- Summerfelt, Steven, Waldrop, T., Good, C., Davidson, J., Backover, P., Vinci, B., Carr, J. 2013 Freshwater Growout Trial of St. John River Atlantic Salmon in a Commercial Scale Land-Based Closed Containment System. Freshwater Institute, January 2013.  
[https://www.conservationfund.org/images/projects/files/FI-ASF\\_Final-Report\\_March-20131.pdf](https://www.conservationfund.org/images/projects/files/FI-ASF_Final-Report_March-20131.pdf).
- Carr, J., Trial, J., Sheehan, T., Gibson, J., Giffin, G., Meerburg, D. 2015. Summary of Proceedings of the Symposium: What Works? A Workshop on the Wild Atlantic Salmon Recovery Programs. Atlantic Salmon Federation, St. Andrews, New Brunswick, Canada, 24 pp.

Sheehan, T., Carr, J. Chafe, G., Renkawitz, M., Robertson, M., Lyberth, B., and Bradbury, I. 2019. Update on Pop-off satellite tagging Atlantic salmon at Greenland. ICES-2019/30.

### **Popular Articles**

Carr, J. 2013. Making it work - ASF co-hosts an international symposium summit on land-based fish farming. Atlantic Salmon Journal, Winter 2013, Vol. 62, No. 4, 2pp.

Carr, J. 2017. A Two-way Street. Atlantic Salmon Journal, Spring 2017, Vol 66, No. 1.

Carr, J. 2018. Breaking the Ice. Atlantic Salmon Journal, Spring 2018, Vol 67, No. 1.

Carr, J. 2016. Using Telemetry as a Tool to Help Unravel the Mystery of Salmon Lost at Sea. SPAWNER 2018.

Carr, J. 2018. Friends in Far Places. Atlantic Salmon Journal, Winter 2018, Vol 67, No 4.