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<tr>
<td>United States of</td>
<td>U1</td>
<td>Forecasts of Atlantic salmon transoceanic migration: climate change scenarios and anadromy in the North Atlantic</td>
<td>Completed</td>
<td>Develop and evaluate marine migration models for Atlantic salmon from North America and Europe; evaluate the potential effects of climate change on migration patterns of Atlantic salmon.</td>
<td>2002 - 2004</td>
<td>Distribution/ migration in the sea</td>
<td>Migration and bioenergetic models</td>
<td>Desk study.</td>
<td>Canada</td>
<td>Kevin Friedland</td>
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<td>America</td>
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<td>United States of</td>
<td>U2</td>
<td>Stable isotope composition of Atlantic salmon scales</td>
<td>Completed</td>
<td>Develop a retrospective time series of stable isotope ratios for the DPS in Maine and the mixed-stock samples from the continental stock complexes to evaluate feeding patterns of the stocks over time.</td>
<td>2001 - 2002</td>
<td>Life history/ biological processes</td>
<td>Post-fishery recruitment marine factors</td>
<td>Desk study. Analysis of scale samples collected at West Greenland and from US returns.</td>
<td>International collaboration in obtaining samples</td>
<td>Kevin Friedland</td>
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<td>United States of</td>
<td>U4</td>
<td>Penobscot hatchery versus wild smolt telemetry</td>
<td>Ongoing</td>
<td>Evaluate migration timing and pathways in the Penobscot Estuary and Bay and estimate survival of migrating smolts and post-smolts.</td>
<td>2005 - 2013</td>
<td>Distribution/ migration in the sea</td>
<td>Migratory behaviour of individual fish</td>
<td>Penobscot Estuary, Penobscot Bay</td>
<td>Canada</td>
<td>James Hawkes</td>
<td>£66,750</td>
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<td>United States of</td>
<td>U5</td>
<td>Comprehensive evaluation of marine survival of hatchery-stocked smolts: migration behaviour and success of Dennys River smolts</td>
<td>Ongoing</td>
<td>Evaluate migration speed and behaviour from lower river release sites through estuarine habitat; estimate survival of migrating smolts and identify areas where mortality may be occurring.</td>
<td>2001 - 2013</td>
<td>Distribution/ migration in the sea</td>
<td>Migratory behaviour of individual fish</td>
<td>Dennys River, Cobscouk Bay, Gulf of Maine</td>
<td>Canada</td>
<td>James Hawkes</td>
<td>£3,500</td>
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<td>United States of</td>
<td>U6</td>
<td>Comprehensive evaluation of marine survival of hatchery-stocked smolts: Dennys River smolt stocking assessment</td>
<td>Completed</td>
<td>Evaluate smolt-to-adult survival rates based on temporal and spatial patterns of release; determine optimal stocking levels to achieve stock rebuilding objectives.</td>
<td>2001 - 2012</td>
<td>Time series of marine survival/growth estimates</td>
<td>Dennys River, Cobscouk Bay, Gulf of Maine</td>
<td>Recovery of marked fish through NASCO West Greenland sampling programme</td>
<td>Joan Triad</td>
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<td>United States of</td>
<td>U7</td>
<td>Evaluation of estuary and nearshore marine distributions of Atlantic salmon post-smolts in Penobscot Bay and the Gulf of Maine</td>
<td>Completed</td>
<td>Evaluate nearshore distribution and migration pathways of smolts and post-smolts; estimate the relative contribution of stocked hatchery smolts to overall post-smolt populations; evaluate the relative contribution of spatially and temporally distinct smolt releases on post-smolt populations; evaluate the physiological condition of post-smolts in marine environments.</td>
<td>2001 - 2011</td>
<td>Distribution/ migration in the sea</td>
<td>Distribution of salmon in the sea</td>
<td>Penobscot Bay, Gulf of Maine</td>
<td>Tim Sheehan</td>
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<td>United States of</td>
<td>U8</td>
<td>Comorant harassment in the Narragansett River/Narragansett Bay</td>
<td>Completed</td>
<td>Reduce predation on migrating salmon smolts by excluding double-crested comorants from the Lower Narragansett River and Bay, and assess the efficiency of non-lethal predator exclusion as a means of reducing predation on migrating Atlantic salmon smolts.</td>
<td>2005 – 2012</td>
<td>Predation</td>
<td>Lower Narragansett River, Estuary and Narragansett Bay, Maine</td>
<td>James Hawkes</td>
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<td>United States of</td>
<td>U9</td>
<td>SALSEA Greenland</td>
<td>Ongoing</td>
<td>Advance understanding of the ecology of the Atlantic salmon West Greenland stock complexes and to gain insights into the factors resulting in recent significant increases in marine mortality across the North Atlantic. (The baseline sampling programme at West Greenland is described in project D1)</td>
<td>2009 - 2014</td>
<td>Distribution/ migration in the sea</td>
<td>Origin of catches in directed fisheries</td>
<td>Ilulissat, Sisimiut, Nuuk and Qaqortoq, Greenland</td>
<td>Canada and SALSEA-Merge consortium</td>
<td>Tim Sheehan</td>
<td>£6,500</td>
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<td>America</td>
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<td>United States of</td>
<td>U10</td>
<td>Using Pop-up Satellite Tags (PSATs) to track adult Atlantic salmon in the Northwest Atlantic</td>
<td>Ongoing</td>
<td>Provide information on localized movement patterns of Atlantic salmon off the coast of West Greenland, large scale movement and migration patterns en route to natal rivers in North America and Europe, locations of overwinter residences and depths and temperatures experienced during the second or third winter at sea in the North Atlantic. These data will be used to evaluate if conditions experienced from September through April are favourable for survival and subsequent spawning escapement.</td>
<td>2010 - 2015</td>
<td>Distribution/ migration in the sea</td>
<td>Migratory behaviour of individual fish</td>
<td>Coastal waters off West Greenland</td>
<td>Norway, Greenland, UK and Canada</td>
<td>Mark Resiwatz</td>
<td>£19,000</td>
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<td>United States of America</td>
<td>U11</td>
<td>Impact of oceanographic changes on Atlantic salmon survival in the Northwest Atlantic</td>
<td>Ongoing</td>
<td>Determine mechanisms controlling the ecosystem-salmon connections and hypothesize on their implications for salmon populations in the future.</td>
<td>2010 – 2013</td>
<td>Long-term monitoring</td>
<td>Time series of marine survival in relation to environmental parameters</td>
<td>Desk study</td>
<td>Tim Sheehan</td>
<td>£52,000</td>
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<td>United States of America</td>
<td>U12</td>
<td>Evaluation of the importance of predator and prey fields and ocean circulation on Atlantic salmon growth and survival in the Gulf of Maine</td>
<td>Ongoing</td>
<td>Evaluate the consequences for Atlantic salmon post-smolt growth and survival of the match or mismatch of spawning runs of diadromous fishes, aggregations of other marine forage fishes, and thermal/circulation patterns in the Gulf of Maine (GoM) with the timing of Atlantic salmon out-migration.</td>
<td>2010 - 2013</td>
<td>Life history/biological processes</td>
<td>Pre-fishery recruitment marine factors</td>
<td>Desk study</td>
<td>John Kocik</td>
<td>£100,000</td>
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