Quebec Wrap up

Québec City warmly welcomed the 1,852 attendees of 133rd Annual Meeting of the American Fisheries Society from 10-14 August. It was the largest AFS meeting ever held in Canada, and the third highest Annual Meeting in attendance overall. The meeting attendees included 404 students and 32 countries were represented. Despite the lure of sunny but cool summer weather, scenic historic sites, and dozens of delightful restaurants within walking distance, attendance was still remarkably high at each of the 20 concurrent sessions held each day. The meeting featured a record 38 symposia and several contributed paper sessions, including 1,300 oral and poster presentations.

us poissons?

The meeting began with the early arrival of the Governing Board, who participated in a memorable retreat at a famous trout fishing lodge. The focus was Canadian fisheries and how AFS could assist their conservation. Saturday's formal board meeting featured presentations on the new Fisheries Conservation Foundation and next year's Fourth World Fisheries Congress in Vancouver. The Board made decisions regarding the future distribution of AFS raffle proceeds, discussed measures to improve the status of AFS journals, and approved incoming President Ira Adelman's plan of work. The weekend schedule also offered several continuing education







Sunday Welcome Social



workshops, including the ever-popular river morphology and electrofishing courses.

Although the "Nouvelle France" street festival in the walled city officially ended on Sunday, it carried on at the evening's Welcome Reception at the Hilton, with musicians, caricature artists, and other street performers entertaining the guests. Free Québec microbrew beer was donated by Unibroue, which also surprised attendees with souvenir bottles given away at registration.







Peter Maitland

Sunday's plenary session

Sunday's plenary session was bi-lingual. with the assistance of earphones and translators. After welcomes by La Societe de la faune et des parcs du Québec, Hydro Québec, AFS President Fred Harris, and the Parliamentary Secretary to the Minister of Fisheries and Oceans, the four plenary speakers began. Daniel Pauly of the University of British Columbia addressed the meeting theme of "Worldwide Declines of Wild Fish Populations." He described the marine ecosystem as a pyramid and talked about how society is "fishing down the food web" to the point where some people are even eating jellyfish. Declining catches worldwide have been masked by false or scattered data. He also described his latest work for the Sea Around Us project, which includes mapping fisheries in space and developing ecosystem models for continental shelf fisheries. Shortfalls in Northern Hemisphere landings have been made up for by unsustainable Southern Hemisphere catches. Pauly recommended establishment of marine protected areas

to help reverse the trend of declining worldwide catches.

The next speaker, John Avise of the University of Georgia, introduced attendees to the field of conservation phylogenetics, a growing and maturing discipline. The method uses a species' place on the tree of life to determine its priority in conservation triage—that is, the longer the Independent Evolutionary History (IEH, the length of the branch on the family tree), the more priority the species should be given in conservation. For example, the American horseshoe crab would have higher conservation priority than any Asian species of horseshoe crab because its IEH is longer. While not a practical argument for choosing turtles over pandas, perhaps, conservation phlyogenetics does have important applications at the intraspecific level in dealing with evolutionary significant units or other management units within a species.

Peter Maitland of the Fish Conservation Centre in Scotland discussed the status of European freshwater fish populations, and the sometimes complex reasons for their decline. Europe is smaller in area but higher in human population than North America, though the patchwork of regulations in many small countries has been replaced by European Union directives. Although no species is extinct, diadromous species such as sturgeon, salmon, and lampreys have been hit hard. Maitland expressed special concern about species not yet protected though listing and about the constant threat of invasion by nonnative species.

To conclude the plenary, John Casselman of the Ontario Ministry of Natural Resources reviewed research projects to assess Great Lakes fisheries, particularly the effects of invasive species and climate change. He described the patterns evident from examining over 45 years of data and discussed how even small temperature changes can dramatically affect recruitment for warm and cold water species. He also considered how substrate changes, increasing water clarity, and decreasing amounts of diporeia due to zebra mussel colonization are influencing fisheries.



John Avise



John Casselman