

**Western Regional Panel on Aquatic Nuisance Species
Annual Meeting Minutes
September 11-12, 2002
Salt Lake City, Utah**

Scott Smith - Welcome from Chair of the Panel

Scott welcomed the members and guests to the 2002 annual meeting and asked that everyone take a moment of silence in respect to those who died a year earlier in the terrorist attacks.

John Chapman - Patterns of Introduction and Prevention

The exponentially increasing invasions of aquatic environments by nonindigenous species and their impacts are unlikely to be underestimated. Three major responses to these invasions have been to close the vectors of dispersal, detect new species and manage the arrivals. Very little progress has been made on either predicting the sources of invaders or their virulence upon establishment. Introduced peracaridan crustaceans are diverse and ubiquitous allowing larger and more detailed analyses of geographical patterns on introductions to appear. The geographical sources and destinations of peracaridans invading northeast Pacific coasts and estuaries are correlated with climate. The sources of these invasions are predominantly on the west sides of the North Pacific and North Atlantic while relatively few invasions occur in the reverse direction. The uniformity of invading species among eastern pacific estuaries indicates that invaders, once established, are massively successful. Although their impacts are poorly measured, both theory and preliminary observations indicate ecosystem level effects of these invading species sufficient to affect fisheries and aquaculture production are already occurring. On the other hand, small biological and environmental variations appear to have massive effects on the successes of these invaders. Great opportunities for ecological or biological control of these introduced species may therefore exist.

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Allegra Cangelosi - NAISA Reintroduction

The Northeast-Midwest Institute was asked to draft the reauthorization of the National Invasive Species Act, passed in 1996. Allegra Cangelosi has worked with stakeholders all over the country including states, regional panels, non-profits and industry to improve and add to the legislation. The new bill will be titled the "National Aquatic Invasive Species Act." Allegra made the presentation by speaker phone with her PowerPoint slides in front of the room.

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Scott Smith reported on the WRP NAISA State Working Group that met by conference call in August to discuss input into the draft legislation and action that states could take while the draft was being circulated. The Working Group will continue to meet by conference call as the bill moves through the legislative process.

Diane Cooper - Update on the National Invasive Species Council and the National Invasive Species Advisory Committee

The Council was created by President Clinton's Executive Order in 1999 and established in 2000. The Council created a Management Plan in June 2001 and an Advisory Council was formed in May, 2002. The Advisory Council (ISAC) will meet four times a year. Diane described the new Task Teams, comprised of both Federal and non-Federal members. The following teams have been activated: Budget, Communication, Control and Management, Early Detection & Rapid Response, Information Management, International Cooperation, Pathways & Screening and Research. ISAC is working on implementing the Management Plan, compiling economic data and establishing performance measures

as well as several other projects.

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Sharon Gross - Update on the ANS Task Force

The ANS Task Force is the aquatic implementation arm working with the Council with a focus on prevention, control and management. The Task Force has been restructured using super-committees and working groups:

The terrestrial weed management issue evolved differently than aquatics, through county weed groups. These structures have been around for decades. The Federal Interagency Committee for the Management of Noxious and Exotic Weeds is a coalition of federal agencies that shares information on terrestrial plant invasives and produces products, such as a Model Rapid Response Plan, and organizes a weed awareness week for Congress every year.

Three states have submitted ANS Management Plans for review by the Task Force this summer: Montana, Alaska and Maine. There will not be any new funds for these states, which means the amount of money available to the states with ANS management Plans will get smaller. There is an increase of \$1 million in the FWS budget for FY 2004 and much of this additional money will go to fund state programs for those states that have management plans.

Dorn Carlson - Research Funding from NOAA

Dorn Carlson reported on speaker phone with PowerPoint slides in the meeting room. Preproposals for the Biennial Sea Grant national competition for research and outreach grants are due September 17. Proposals can request \$150,000/year for two years. A 50% non-Federal match is required. The ANS Research and Outreach program priority areas are:

- biology and life history
- effects on ecosystems
- socioeconomic impacts
- control and mitigation
- preventing new introductions
- reducing the spread of established populations

Based on preproposals, applicants will be encouraged or discouraged to submit full proposals. Final selections will be made in March 2003. More information can be found at <http://www.nsgo.seagrant.org/research/nonindigenous>.

NOAA is interested in obtaining information from the WRP as well as the other regional panels about what we consider to be research priorities.

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Members Update

Pat Lim - no notes taken

Blaine Parker - no notes taken

Tom Conry - no notes taken

Wendy Ralley - Province of Manitoba, Canada

The Zebra mussel Inspection Program received funding for 2002-2004 to hire student inspectors to conduct interviews and inspections of water-based equipment, based on 100th Meridian survey. Pamphlets with ANS message provided to registrants of local fishing derbies. In January 2002, the National Code on Introductions and Transfers of Aquatic Organisms was drafted. The Code was developed in cooperation with federal and provincial governments to establish a protocol and process for assessment, including risk analysis, for intentional introductions and transfers of aquatic organisms. Current research efforts include long-term effects of common carp in Delta Marsh, population dynamics and provincial distribution of rainbow smelt, biological control efforts against purple loosestrife and passive monitoring for zebra mussels in water bodies with high recreational boat traffic.

Dennis Wright - Fisheries and Oceans, Canada

Canada has national initiative to bring together all non-native interests; they are about 5 years behind the US. A book will be released looking at non-native species issues. There will be a major announcement within the next couple of weeks regarding funding initiatives. Alberta - the current issue is culture of non-native species. This is based on the escape of 1700 triploid grass carp from an irrigation project into Bull River which was not reported for six months.

Ted Grosholz - UC Davis

Several green crab projects. RIDNIS project - video. Ted is working on CA ANS Management Plan. Ted has hired a person to get that written in the next year. Sponsored Calverpa Conference in February - proceedings almost available.

Anita Cook - Nevada Division of Wildlife

Awareness is increasing in the state. Colorado River Fishes Council Meetings and WAFW Agencies meetings have increased awareness by upper management. Anita attended the New Zealand Mud Snail workshop and ANS-HACCP meeting in Bozeman in August. She will strongly urge hatchery managers to attend next training in California. Anita will address cleaning protocols for field crews and for scientific collecting permit holders by next season. NZMS cards have been distributed. She mentioned two needs; brochures for pet stores; and something like Sea Grant to fund projects in interior states.

Mark Sysma - Portland State Center for Lakes and Reservoirs

- Served as Chair of Oregon Invasive Species Council. The Council produced a "100 Worst List" of species threatening but not yet established in Oregon.
- Conducted zebra mussel and mitten crab monitoring and outreach and mitten crab research in collaboration with PSMFC.
- Completed first year of a two-year project to characterize nonnative species in the lower Columbia River from Bonneville Dam to the Pacific Ocean. Sampled 50 sites along the lower Columbia.
- Worked under the Columbia River Aquatic Nuisance Species Initiative to establish the Oregon Ballast Water Management Program.

Tony Willardson - Western States Water Council

The Council members are water managers. They are still in information and education mode about ANS. The Council had a meeting in North Dakota and ND staff gave information about ANS. The main interest is water transfer and water quality issues - work closely the Western Governors' Association.

Doug Jensen - MN Sea Grant - Liaison with Great Lakes Panel

Doug commented about the Internet trade in exotic plants - some research shows hydrilla being sold on many Internet sites. Sea Grant is preparing a report. Doug reported on three workshops on Hazard

Analysis and Critical Control Point (ANS-HACCP) were presented in the west this summer. The "Stop Exotic"s videos are available for \$10.00. "Exotics to Go" CD has powerpoints and scripts, plus publications in .pdf format. They are available from Doug and on the Minnesota Sea Grant website.

Sharon Gross - ANS Task Force

Communications Outreach Committee of the ANS Task Force has website at www.protectyourwaters.net pointed toward recreational users and how they can prevent spread of ANS.

Henry Lee - EPA

The EPA is working with the USGS on database. EMAP list - environmental quality list for estuaries. Sampling marshes in S. California and San Francisco. Will have comprehensive survey of West Coast. Ballast water: EPA is not getting involved yet. Funding sources - look at STAR grants - \$4 million, closed in July, it does incorporate invasive species.

Joan Cabreza - EPA - R10 in Seattle.

Joan is on a detail to develop an Invasive Species strategy for EPA.

Nate Dechoretz - CA Dept. Of Food and Agriculture.

Nate reported on the water hyacinth program in California - they will initiate a bio-control program in SF Delta. New regulatory requirements for NPDES permits has doubled the Boating and Waterways budget for monitoring and preparing permits. However, not much new information has been discovered. The major aquatic program is control and eradication of hydrilla. Eradicated from 13 counties so far. They have also developed an outreach program on vertebrate pests to levees.

Ralph Stoaks - APHIS - (need to change address).

At this time, there are 23 western states in the region with 120 seaports and airports as well as state capitals. The new Homeland Security Department may change significantly where the inspectors are and what they do. Domestic work force will hopefully not change. If an organism starts to get out of control, APHIS moves in with rapid response team. They also have a research arm with labs scattered around the country.

Kim Webb - CALFED ecosystem restoration program

CALFED is a cooperative effort of feds and state for San Francisco Bay/Delta. Over the last 3 years, they have distributed \$3 million in projects. The program has been renewed for 3 more years. Thus, the efforts to address invasive species will expand. A person will be hired at end of September to exclusively work with partners on ANS issues. One of the tasks will be to develop an aquatic species specimen collection.

Lynn Schlueter - ND

Lynn has been focusing on mass media education as well as visiting sportsman's groups and fishing tournaments. He is developing posters, a brochure and is finalizing a website. ND has ANS signs at boat ramps but Lynn feels there is a need to change the signs because people stop noticing. Zebra mussel substrates have been put out at popular lakes. Monitoring at lakes will put on ARCVIEW. He is working with local water boards on purple loosestrife and tamarisk. Curly leaf pondweed has been identified in several spots and is moving. The poster species for ANS is Asian Carp.

Keith Ward - US Coast Guard

The Coast Guard is funding research on treating ballast water. Nothing has proved to be absolutely effective. The Coast Guard reported to Congress in June on how voluntary ballast water exchange project is going. It is not working well. The next step is mandatory requirements. They are developing a standard for ballast water treatment and may change standards from a certain numbers to not releasing ANYTHING under a certain size.

Adelheid Hermann - Native American Fish and Wildlife Society

The Society has a newsletter which Adelheid will send out to the membership electronically. It went to 3500 people along the coast. The national conference was in Anchorage last year. They had a session on ANS and other noxious weeds and it helped to build awareness.

Stephen Phillips - Pacific States Marine Fisheries Commission

PSMFC is mainly funded by Bonneville Power Administration. Stephen is also working on a Lewis and Clark Bicentennial project with funding from the US Fish and Wildlife Service. They have a zebra mussel hotline - posters available. 400,000 zap the zebra brochures will be distributed. Zm' substrates to monitor infestations are being distributed. Montana will put in three Traveler Information Stations - targeted messages to boaters. Stephen hired a contractor to interview marina operators along the Missouri River - have sent boxes of information to operators and portage operators. PSMFC is also monitoring mitten crabs. 100,000 copies of West Coast Mitten Crab card available. They hosted a Pacific Ballast Water Group meeting in April - may have another meeting in the winter in British Columbia.

Kevin Anderson - Puget Sound Water Quality Action Team

Kevin works with Pat Lim on the Georgia Basin/Puget Sound Task Force. They are sponsoring a research conference in March 31-April 3 in Vancouver in 2003 and will have an ANS Panel at the conference - abstracts due at end of October. The Association of National Estuaries has a NISA reauthorization committee to support the new bill.

Marshall Meyers - Pet Industry Joint Advisory Council

Be a responsible pet owner - never release >>>> 30 million households. Will test the message on all Wal-Mart fish bags. They are also creating pet store signage and are looking at web page targeting hobbyists. The Council has developed a National Reptile Improvement Plan - best management practices.

Susan Ellis - CA Dept. Of Fish and Game

Susan reported on legislation which is on the governor's desk to establish a CA Invasive Species Council.

Larry Riley - Arizona Fish and Game

New Zealand Mudsnaills have been found in the lower Colorado River below Glen Canyon Dam.

Gary Skiba - Colorado Division of Wildlife

The CDOW will propose funding for an ANS planning process to begin in July of 2003. Based on Mike Fraidenburg's recommendations, the funding request will be based on hiring the necessary personnel to complete the plan. They have contacted Colorado State Parks to see if ANS information can be included in boating safety courses and to include ANS brochures with boat registration materials. Gary has assisted Tina Proctor in approaching the state Ports of Entry office to gain their assistance in distributing information to commercial boat haulers through their facilities.

Randy Radant - Utah Division of Wildlife Resources

State Parks kiosks now include ANS message. ZM substrates placed in major waters. NPS is active at Lake Power to provide prevention of Zms into Lake Powell. 1000 signs for distribution around the West funded by the Fish and Wildlife Service. New Zealand mudsnails (NZMS) were found in Green River. Research being done by Utah State to look for NZMS - found in three new sites so far. Utah DOW hosted ANS-HACCP training in Salt Lake City in June.

Scott Smith - Washington - no notes taken

Mike Stone - Wyoming - no notes taken

Marcia Brockbank -San Francisco Estuary Project

SFEP has an agreement with CA Boating and Waterways to do outreach; distributing 50,000 ANS materials with boating registrations. Spartina project - EIS just completed.

Committee Chairs

Ted Grosholz - Coastal Committee

- Continue Support for Screening Policy - more discussion to come.
- International Coordination - John Chapman is still working on this.
- Green Crab/Mitten Crab coordination - both are being monitored by different organizations and states. Need information management more than anything else now.
- ANS training and guidance for watershed groups. Funding they were expecting hasn't happened. Paul will put in another proposal. Has started out in Oregon on a pilot project scale.
- Database coordination - Henry Lee

Blaine Parker - Inland Committee

- Review Giant Salvinia Management Plan - Plan is available: contact Earl Chilton, Texas Wildlife and Parks
- Lewis and Clark Bicentennial - outreach
Looking at putting in ads at Lewisandclark.com plus radio psa's

State Management Plans - report by Mike Fraidenburg

- first agency meeting in California has occurred
- He may facilitate other stakeholder meetings in California

Rapid Response Plan - report by Nate Dechoretz

- Ready to be bound and distributed.
- Used salvinia and caluerpa for examples. Had good examples in certain areas but lacked some necessary elements. Emphasize strengths but understand some of the shortfalls.
- Other Rapid Response Plans - National Invasive Species Council RRP committee will be testing some of the plans, including the WRP plan.

Website - report by Tina Proctor

The new WRP website is <http://answest.fws.gov>. Please check it out and give suggestions to Tina.

Brochure and Display - report by Marcia Brockbank

Marcia reported that anyone can order a WRP display if they want to. Brochures are available through Tina.

WRP Business Meeting - led by Jim Athearn

There was an e-mail-in ballot to clean up details about the Guide to Procedures. Needed 24 yes votes. Tina received 27 e-mail ballots. All five measure passed. She will put the revised Guide to Procedures on website.

Jim presented the attached WRP financial report.

State Report - presentation by Tina Proctor

Tina called all the state members with a list of questions regarding their state ANS coordination framework and activities. Pam Meacham, Washington Department of Fish and Wildlife, prepared color coded slides to show the results of the survey in a visual manner. After the presentation and discussion, members mad the following suggestions:

Send list to members and have everyone review. Identify as a position statement. Diane Cooper suggests that this list needs to be consistent with the National Management Plan. Need clarification on how things are stated. Have members read and make changes. Have states give input on how it would best serve them. Supportive document not mandatory.

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NISC/ANSTF Screening/Pathways , Scott Smith and Marshall Meyers

No notes taken.

Implementing Hazard Analysis and Critical Control Point (HACCP) and Preventing Spread of ANS in the West by Bob Pitman

Bob reported on three Hazard Analysis and Critical Control Plan trainings that were held in the west and led by Doug Jensen from Minnesota Sea Grant and Michael from Michigan Sea Grant. The purpose of the training is to teach federal, state and private aquaculture staff and field biologists who are moving fish from one water body to another or who are stocking fish or who are moving their boats, gear and bodies from between different waters, how to determine what are the critical points to note where ANS could be spread from one place to another.

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Preventing the Spread of ANS Through Public Outreach: Best Approaches to Get the Word Out by Doug Jensen

Why Bait Fish present a potential pathway for Invasive Species by Lynn Schlueter

States vary greatly on rules. Some don't allow any importation. North Dakota, Wyoming and Montana have a ban on importation of live bait by common angler entirely. Baits - fish, vertebrates, invertebrates. Species used changes depending on what is popular. Pathogens can be transported, some viruses can be transported in frozen fish.

Atlantic Salmon Panel

Andrew Thomson - Fisheries and Oceans Canada

Atlantic Salmon Watch Program

Fisheries and Oceans has put up posters all over British Columbia telling people how to identify Atlantic Salmon. So far, not a single anadromous population has been established. In BC, there are 100 operating sites for producing Atlantic salmon - 4th largest producer in the world. There have been massive declines in native salmon sales because of large reduction in fleet (licences bought back) but Atlantic salmon production has become an important economic activity. Average 40,000 adult escapes per year. There are nine current escapes in Washington, including a one-day 370,000 fish escapes.

BC Marine Catch report to BC from fishermen and from processors. Most AS are caught in gill net fisheries. Washington and Alaska both monitoring AS catch as well, with the information being sent to Andrew.

Stomach contents study shows that they don't adapt well to natural food. AC have mostly empty stomachs while BC Pacific Salmon have 75% prey items in stomach.

BC doesn't have a consistent data source for river returns. Have swimmers checking the rivers.

2001 First Nations AS Watch Program. 60 members of Coastal First Nations train in techniques safety. Deployed in 130 surveys carried out in 58 different systems. 375 km of streams have been surveyed with more than 390,000 salmonids counted, and only 2 AS were found in September through December.

In 1998, first feral juvenile fish were captured. Higher numbers in 1998 or 1999, almost none found in 2001 or 2002. Andy reported that they need to get a discrimination technique to tell if adults that are found are escapees or feral fish.

Andy does lots of media relations and public relations—a highly charged political debate. There is a high level of misinformation from both sides. 20 % of aquaculture is Chinook salmon and will use genetic analysis to determine the percentage of escaped fish versus native fish.

ASWP website: www-sci.pac.dfo-mpo.gc.ca/AQUA/PAGESA?ATLSALM.HTM

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Andrew Appleby - Washington Dept. of Fish and Wildlife

There is a problem in Washington with the authority over salmon aquaculture. Different departments had authority over different aspects. No one could say that a specific species would be prohibited. A bill was introduced in January 2000 specific to Atlantic salmon. At the time NMFS listed populations of Chinook salmon and chum. Suggested that the bill refer to "marine finfish" which died in committee. A subsidiary of the Norwegian company, Pan Fish, has 9 leased sites in Washington. The company also owns many of the sites in BC. A bill passed in 2001 - included all marine fish - which said the state would negotiate with industry to draft rules, and report to the legislature in 2002.

2nd Substitute House Bill 99. Rules call for eradication of Atlantic salmon found spawning in WA waters. It also calls for adoption of Atlantic Watch Program like BC, but gives no authority for fees or fines or funding. They got industry to agree to mark their fish to identify the grower. Washington can monitor escape prevention plans or rapid recapture plans. Staff can remove all Atlantics in performance of duties.

Dale Kelley - Executive. Director for Alaska Trollers Association

Dale represents hook and line salmon fisheries. Fisheries limited to SE Alaska - largest resident fleet in the State. Fishing is the biggest employer and second biggest revenue generated in the state. As a reminder, Dale mentioned that it took three votes to get Alaska into statehood - because US wanted to protect the salmon resources. Managed for salmon under the Pacific Salmon treaty. The Association is

opposed to raising Atlantic salmon on the Pacific coast. 2500 spawning streams in SE Alaska - may be missing AS if they are occurring there.. Alaska has a ban on fish farming in State waters. There is more awareness now because of information going to the fleets about what to look for. People are on guard. At this point, there are more questions than answers. In mid-1980's Norway rotenoned 70 systems because of disease problems. 5 multinational corporations own 85% of the fish farms in BC. Suggest closed containment systems.

Discussions by group on requiring industry to pay for watch programs, or use closed containment systems. Three panelists would like to have 100% marked fish. They stressed the importance of tracking where they are found and keeping good records.

Economic Impacts of Zebra Mussels in the West: Research Proposal by David Lodge, U. Of Notre Dame

Process of species invasion - examine the pathway when prevention is actually possible. We need to increase our ability to predict invasion so we can improve our ability to prevent them. Kolar & Lodge researched species of fish in the Caspian Sea - there are 5 species that are similar to fish we've had problems with in the past. We need pathway analysis as to how these fish might get to the US. David is working with two other researchers, Shogren at U. of WY and Leung at Notre Dame to develop ecological modeling can be used to evaluate prevention strategies. The result is to see what kind of investments would be optimal to be preventative but also a good cost-benefit ratio.

Lodge will look at market costs. It would be worth spending up to \$324,000 per year per lake to prevent invasion - to protect power plants alone.

Which river systems provide habitat? What are the pathways? What are at-risk commercial & environmental goods and services? What are costs & effectiveness of prevention strategies? What would be the cost-effective level of investment in prevention and control?

The group had a discussion about WRP support for this kind of research. Do power companies care - they can pass on the costs. How do we get the message to constituents? Cost proposal - \$200,000 to answer the five questions in one or two areas, possibly Lower Colorado and the Columbia River Basin. The members agreed that the WRP will write a support letter for the initiative when Lodge requests funding from Sea Grant.

Work Plan Discussion

Members discussed the committee work plans and developed the attached work plan for 2003.

Next Meeting

The next meeting will be in La Jolla, California, September 9-10, 2003. Paul Olin will work on making meeting arrangements.

Minutes by Tina Proctor, WRP Coordinator
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