GULF & SOUTH ATLANTIC REGIONAL PANEL
ON AQUATIC INVASIVE SPECIES
MINUTES
Tuesday and Wednesday, April 27-28, 2010
Gulfport, Mississippi

Chairman Ron Lukens called the meeting to order at 8:30 am. The meeting began with introductions of the Panel members and guests. The following were in attendance:

Members and Proxies
Ralph Allemand, LDWF, Baton Rouge, LA
Diane Altsman, EPA GOMP, Stennis Space Center, MS
James Ballard, GSMFC, Ocean Springs, MS
Mike Brainard, MDMR, Biloxi, MS
Paul Carangelo, Port of Corpus Christi Authority, Corpus Christi, TX
Earl Chilton, TPWD, Austin, TX
Pam Fuller, USGS, Gainesville, FL
Chris Furqueron, National Park Service, Atlanta, GA
Lisa Gonzalez, HARC, The Woodlands, TX
Leslie Hartman, TPWD, Palacios, TX
Jeffrey Herod, FWS, Atlanta, GA
Dewayne Hollin, Texas Sea Grant, College Station, TX
Tom Jackson, NOAA-NMFS, Miami, FL
Chuck Jacoby, University of Florida/Florida Sea Grant, Gainesville, FL
David Knott, SCDNR, Charleston, SC
Herb Kumpf, At-Large Member, Panama City, FL
Susan McCarthy, FDA, Dauphin Island, AL
Roberto Mendoza, UANL, Monterrey, MX
Doug Nemeth, US Navy, Jacksonville, FL
Martin O'Connell, UNO, New Orleans, LA
Marilyn Barrett O'Leary, At-Large Member, Pontchatoula, LA
Ron Lukens, At-Large Member, High Springs, FL
Dennis Riecke, MDWFP, Jackson, MS
Don Schmitz, FDEP, Tallahassee, FL
John Teem, FL Dept. of Agriculture and Consumer Services, Tallahassee, FL
Keith Weaver, GDNR, Social Circle, GA

Staff
Nancy K. Marcellus, GSMFC, Ocean Springs, MS

Others
Jason Dallard, MDMR, Biloxi, MS
Jon Lane, US Army COE, Jacksonville, FL
Charles Lester, USCG, New Orleans, LA
Greg Morris, US Customs, Gulfport, MS
Michael Pursley, MDMR, Biloxi, MS
Naitram Ramnanan, CABI, Trinidad & Tobago

Public Comment

Chairman Ron Lukens provided the opportunity for public comment. No public comments were received.

Review and Adoption of Agenda

The agenda was adopted as presented.

Review and Approval of Minutes (*11/10-11/2009, Raleigh, NC*)

Due to technical difficulties with the recordings, the minutes were deferred to a later date.

Monitoring and Eradication of Invasive Aquatic Plants in South Mississippi
Michael Pursley, Mississippi Department of Marine Resources

Invasive Aquatic Species - Why Should We Care?

- Water Use Losses
  - Boating, Fishing, Swimming Access Hindered
  - Pumping Water for Domestic and Agricultural Uses Reduced
  - Native and Threatened/Endangered Species Displaced
- 1.4 Trillion Dollars in Losses/Year Worldwide
- Second Largest Threat to Biodiversity
  - Over 15,000 species threatened worldwide with extinction
  - Over 1,200 in North America

Characteristics of Non-Native Invasive Plants

- Able to Establish in Natural Areas
- Rapid and Aggressive Growth
- High Rate of Reproduction
- Spreads Easily
- No Diseases or Predators

How Do Invasive Species "Get Here"?

- Shipping
- Intentional Introduction
- Nursery Industry

- Anglers/Bait Industry
- Aquarium/Water Garden Trade
- Natural Dispersal

Common Invasive Plant Species of South Mississippi

- Giant Salvinia (*Salvinia molesta*)
- Common Salvinia (*Salvinia minima*)
- Water Hyacinth (*Eichhornia crassipes*)
- Chinese Tallow (*Triadica sebifera*)
- Cogon Grass (*Imperata cylindrica*)
- Common Reed (*Phragmites australis*)
- Parrot Feather (*Myriophyllum aquaticum*)
- Alligator Weed (*Alternanthera philoxeroides*)
- Torpedo Grass (*Panicum repens*)
- Giant Reed (*Arundo donax*)
- Invasive Roses (*Rosa spp.*)
- Japanese Climbing Fern (*Lygodium japonicum*)
- Kudzu (*Pueraria montana*)
- Eurasian Watermilfoil (*Myriophyllum spicatum*)

Monitoring for Invasive Plants

- Boat Surveys
  - Presence/Absence Point Sampling
  - Plant Area Mapping
- Land Surveys
  - Presence/Absence Point Sampling
  - Plant Area Mapping
  - Transect Surveys
- Aerial Surveys
  - Large Area Coverage
  - Follow-Up Boat or Land Survey

Early Detection Rapid Response (EDRR)

- Surveying and Monitoring Program
- Goal is to Find Plants at Early Stages of Invasion
- Less Damage to Environment
- More Cost Efficient Than Eliminating Widespread Problem

Cost of Invasive Aquatic Plant Control

- Florida spent $27 million in 2006 on AIS control efforts
- LDWF spending $12 million/year on giant salvinia control
- OTA estimates national cost of AIS control = $135 million
- Early detection and rapid action essential to minimize control costs and protect coastal Mississippi's economic interests.

Current EDRR Objectives

- Control and eliminate, if possible, giant salvinia from the Pascagoula River
- Manage common salvinia population outbreak in the Bogue Houma (Pearl River)
- Early detection and control of new AIS
- Spray less noxious invasives where control is feasible
- Yearly mapping of AIS in the survey area.

Effects of Hurricane Katrina on Giant Salvinia

- Tidal surge stranded salvinia on land, in trees and on structures
- Increased salinity killed much of existing infestation
- Concern that storm may have spread salvinia to new areas
- Surviving salvinia was rapidly re-infesting area
- Reduce population provided a window of opportunity for control.

Post Katrina Pascagoula River Mapping Project

- Summer, 2006
- Exhaustive aquatic invasive plant inventory
- Thales mobile mapping device
- Point search every 1,000 ft.
- Recorded - Water temperature, salinity and all invasive plants encountered
- Logged 3,300 points, surveyed 400 miles in 37 field days.

Large-Scale Experimental Farming of Salvinia Weevils

- Started in 2008
- Cooperative effort between private landowner, state agency and university
- To date, over 54 million weevils have been released
- Reduction in salvinia biomass already apparent
- Long term results.

Current Giant Salvinia Control Efforts

- Known areas surveyed and sprayed every 10-14 days

- Former areas surveyed monthly
- Quarterly low-altitude aerial surveys provide a view of inaccessible areas
- All waterways in South Mississippi now being regularly surveyed for aquatic invasive species
- AIS mapping using tablet PC w/GPS and ArcPaD 7.1 underway.

Avoiding Spread of Invasive Plants

- Clean radiators, screens, and equipment parts that collect seed or come into contact with soil or rhizomes.
- Inspect all sources of off-site material such as soil, gravel, and mulch before allowing on property.
- Establish central staging areas to allow easy inspection and monitoring of equipment and materials for the introduction of invasive species.

Model-Based Projection of Nile Tilapia's (*Oreochromis niloticus*) Invasive Ability in Coastal Mississippi
Mark Peterson, University of Southern Mississippi

Objectives:

1. Physiological Tolerances
2. Model Projections

Methods:

- Nile tilapia from Robinson Bayou, MS (Pascagoula River)
- Summer (29.4 C 1.1 SD) and Winter (13.9 C 0.3 SD)
- 0, 10, 20, 30, 40, 50, 60, and 70% salinity
- 12 fish per treatment in summer (n=192)
- 10 fish per treatment in winter (n=176)
- Mortality (both sexes)
  - Kaplan-Meier estimator
    - Log-rank test
- Female growth (g BW•day^{-1})
  - Kruska-Wallis
    - Mann-Whitney U tests
- Female Gonado-Somatic Index (GSI)
  - One-way ANOVA
    - Adjusted for final body mass (g)
  - Relative oocyte abundance and batch fecundity
    - Relative batch fecundity mirrored GSI

- Logistic Regression
  - Survival
    - 1 = survived
    - 0 = died
  - Growth
    - 1 = positive growth
    - 0 = negative growth
  - Reproduction
    - 1 = GSI > 1.8
    - 0 = GSI < 1.8
  - Biologically relevant thresholds
    - Minimum probability for each variable
- Salinity and Temperature Data
  - Multiple data sources (GCRL, MS-DEQ, MS-DMR, and USGS)
  - 1992-2009
- Universal Kriging
  - Two separate salinity maps
    - Summer (27.5 - 32.5◦C)
    - Winter (12.5 - 17.5◦C)
  - $P(x)$ of survival (S), growth (G), and reproduction ®
    where, $P(x) = \frac{\exp(\alpha + \text{salinity}' \cdot \beta)}{1 + \exp(\alpha + \text{salinity}' \cdot \beta)}$
  - Biologically relevant threshold

Summary

- Broad range of physiological tolerances
  - Survival
    - 40 ppt in the summer
    - Enhanced at 10 ppt in the winter
  - Grow and reproduce equally well in salinities up to 20 ppt in the summer
    - Stressed during winter

- Few areas in the Sound that Nile tilapia can not survive or grow in the summer
  - Reproduction limited to lower salinity .
  - Ditto for winter survival.

Funding Agencies

- Mississippi Department of Wildlife, Fisheries and Parks
- U.S. Fish and Wildlife Service, Region 4
- U.S. Geological Survey Invasive Species Program.

Overview of CABI's Invasive Species Programs

Naitram (Bob) Ramnanan gave a PowerPoint presentation entitled "Mitigating the Threats of Invasive Alien Species in the Insular Caribbean - A Framework for Regional Cooperation".

Importance of Caribbean Biodiversity

- Spans 4.31 million km^2 of ocean and just 0.26 million km^2 of land area.
- Encompasses most island groups in the Caribbean Sea and extends to southern tip of Florida
- Contains habitats of international biodiversity and conservation value
- High level of endemicity
  - 60 spp. of corals
  - 25% of the 1500 fish species
- Caribbean "biodiversity hotspot"
- Ramsar and UNESCO World heritage sites
- Ecosystems provide services, food security and support vital industries, e.g. agriculture, fisheries, tourism
- Global connectivity, especially of marine ecosystems.

Caribbean Vulnerability to IAS

- Geo-physical and ecological
- Political, social and economic
- Multiplicity of pathways
  - Growing numbers of tourists
  - High volume of traded commodities
  - Increase in leisure, commercial, air and sea traffic
  - Deliberate introduction of ornamental plants, pets and aquaculture organisms
- Inadequate capacity and linkages between key stakeholders
- Influence by trading partners.

Assessment of Caribbean Alien Species

- Kairo et al. (2003) reported 552 alien species in insular Caribbean
  - 449 terrestrial (390 naturalized/invasive)
  - 55 freshwater (10 naturalized/invasive)
  - 18 marine (16 naturalized/invasive)
  - Acknowledged: serious knowledge gaps in all areas, particularly aquatic (marine, freshwater) ecosystems

- Lopez & Krauss (2006) reported 118 marine species (based on a 2006 review of the Wider Caribbean), including:

- 39 fish
- 31 arthropods
- 15 molluscs
- 14 microalgae

IAS Priorities Defined:

In 2002-2003, CAB International (CABI), in collaboration with The Nature Conservancy (TNC) undertook a project "Invasive Species Threats in the Caribbean Region".

The report (Kairo et al. 2003) identified the following priority areas:

- Development of national and regional policies and strategies
- Specific action plans to deal with present and potential problems in terrestrial, freshwater and marine ecosystems.
- A framework for exchange of information, in particular networking with existing/ongoing or proposed projects/activities
- Access to information:
  - Strengthening existing national/regional mechanisms; Or
  - Creation/development of a specific initiatives focused on the Caribbean
- Capacity building (prevention/management of IAS, taxonomy)
- Regulatory and legislative frameworks: awareness-raising among policy and decision makers
- Global linkages (Global Invasive Species Programme (GISP), International Maritime Organization (IMO) etc.

Development of a Proposal for Funding by the Global Environment Facility - Activities began in 2003, with consultations to develop partnerships and linkages.

- Global
- Regional agencies, including the Caribbean Invasive Species Working Group
- National organizations - Ministry of Agriculture/Environment and related agencies, in particular GEF Focal Points in the countries that expressed an interest in participating in the project.

Project Goal and Objective

Goal: The project goal is to conserve globally important ecosystems, the species and genetic diversity within the insular Caribbean.

Objective: The project objective is to mitigate the threat to local biodiversity and economy from IAS in the insular Caribbean.

Relevance of GEF Initiative to Wider Caribbean

- Regional approach to tackle IAS issues
- Co-operation and linkages to facilitate information exchange
- Support ongoing/future IAS initiatives in the region
- Strengthen position to develop national/collective IAS strategies
- Opportunity for countries to contribute to the region-wide IAS strategy to be developed.

Mitigating the Threats of Invasive Alien Species in the Insular Caribbean: Regional Strategy

- Regional IAS Strategies for Marine, Terrestrial and Aquatic IAS that recognize the economic, ecological and political complexities in the region will be developed in collaboration with international, regional and national stakeholders.
- The Regional Strategy will build on individual and national strategies and expand the draft Caribbean Regional Invasive Species Intervention Strategy (CRISIS) document, which deals primarily with agricultural pests and diseases.
- Three separate Regional Consultations will be held in this regard by the end of 2010.

Over the next four years the project will:

- Establish a National IAS Steering Committee
- Develop a Draft National IAS Strategy for the Dominican Republic
- Conduct baseline surveys for flora and fauna in the two pilot sites
- Devise eradication strategies for IAS identified above.

Port of Gulfport Cargo Inspection Process - Prevention of Invasive Species
Greg Morris, Agriculture Specialist
U.S. Customs and Border Protection, Gulfport, MS

Imports into Gulfport

- Produce from Central and South America
  - Bananas
  - Plantains
  - Pineapples
  - Peanuts
- Clothing
- Ore
  - Usually from Australia, South Africa, and Mexico

Inspection Processes

- Tailgating
- Ship's Stores
- 100% Stripout of Cargo (if needed)
- Monitor Proper Disposal of Garbage
  - Done with ships and aircraft arriving from foreign.

What They Look For

- Wood Boring Insects
  - Two of the Most Important
    - Emerald Ash Borer
    - Asian Long Horn Beetle
- ALL Wood Packing Material with Cargo Must Have IPPC Stamp to Prove Heat Treatment.
- Inspections of Stores, Food, and Garbage on Ships and International Flights Look for Fruit or Vegetables that Could Be a Host for Insects.
  - Usually tropical and subtropical fruits such as citrus fruits, peaches, pears and apples.
  - Biggest threat is the Mediterranean Fruit Fly.

Prohibited Stores and Foreign Garbage

- If any of the stores on ships are considered fruit fly hosts, the stores are immediately sealed. The crew can only open sealed stores once ship has exited U.S. waters.
- Ships must keep log of garbage disposal at foreign ports. The log is checked by CBP AG Specialists upon arrival in Gulfport.

Aircraft Stores and Garbage

- All foreign arriving aircraft must dispose of garbage at USDA approved sites or make arrangements to have garbage picked up by USDA approved companies that incinerate or sterilize the garbage.
- All foreign arriving aircraft and vessels are boarded by CBP AG specialists to ensure these compliances are done.

Safeguarding Against Animal Disease - Foot and Mouth Disease (FMD)

- The U.S., has been free of FMD since 1929.
- FMD is a virus that causes blisters in the mouths and erosion of the tongues in cattle and swine. However, other cloven-hooved animals can be affected.
- Causes severe losses in meat and milk production.
- One host of FMD is soil from countries that have been known to have had FMD infections.
- Any container that comes from a FMD country into Gulfport that has soil on it is pressure washed to terminate the threat.

Live or Dead Animals

- Anytime a live or dead animal comes into Gulfport from Foreign on a plane or ship, veterinary services (USDA) is contacted.
- Veterinary services makes the final decision only if the animal is admitted into the U.S.

Inspection of Cargo

- Most produce and dry cargo containers are tailgated.
- If insects are found within or on the containers, the insect is taken to a USDA identifier to determine if the insect is considered a threat to American agriculture.
- If the insect is considered a threat, the container must be fumigated to eliminate the threat or the entire container must be re-exported.

Plant Diseases

- Upon inspection of fruit containers, if any of fruit appear to have any diseases, a sample if sent to a USDA plant pathologist to determine if threat is present.
- If disease is detected, the entire shipment is re-exported or destroyed.

Invasive Plants and Seeds

- While inspecting containers, if any plants or seeds are found, the seeds and plants are sent to a USDA botanist to determine if a threat of an invasive plant is present
- If a threat is found, the container is fumigated or the container must be re-exported.

Update on New Introductions and Overview of New USGS Website
Pam Fuller

Changes to NAS website:

- All web page URLs have changed from *.asp to *.aspx (please update any bookmarks or links you have)
- New point distribution maps!
  - Ability to zoom, pan, identify points
  - Change backgrounds
  - Add layers (more in the future).

GSARP Area Alerts Since October 2009:

- Green Anaconda - Florida
- Green mussel - Florida, South Carolina
- Chinese myserysnail - Florida
- Charru mussel - South Carolina
- Oriental Westherfish - Alabama, North Carolina, Florida

- Blackchin tilapia - Florida

Other Areas of the Country
Expansion of:

- Quagga mussels
- Zebra mussels.

U.S. Army Corps of Engineers Invasive Species Activities
Jon Lane, U.S. Army Corps of Engineers

USACE Invasive Species Policy (June 2009)

- This policy memorandum is applicable to the entire spectrum of Civil Works programs and projects and meets the spirit of the National Invasive Species Management Plan.
  - Measures to either prevent or reduce establishment of invasive and non-native species will be a component of all Corps Operations and Maintenance (O&M) at project sites as well as a part of implementation of a Civil Works project.
  - Civil Works planning documents will address invasive species concerns in their analysis of project impacts.

Policy Goals & Objectives

a. Leadership and Coordination: Work strategically, using all Corps scientific, management, and partnership resources in unison to manage invasive species.
b. Prevention: Prevent introduction and establishment of invasive species to reduce their impact on the environment, economy, and health of the United States.
c. Early Detection and Rapid Response: Develop and enhance the capacity to identify, report, and effectively respond to newly discovered localized invasive species.
d. Control and Management: Contain and reduce the spread and populations of established invasive species to minimize their harmful impacts.
e. Restoration: Restore native species and habitat conditions and rehabilitate high-value ecosystems and key ecological processes that have been impacted by invasive species to meet desired future conditions.
f. Research: Conduct appropriate research and development activities to ensure management programs are effective and science based. Sound scientific information is critical in guiding management activities, determining the magnitude of invasive species problems, planning future research and management programs, and improving intervention efforts.
g. Information Management: Implement management actions to track invasive species data.
h. Education and Public Awareness: Education, communication, and interpretation programs can convey how the public can help prevent, identify, detect, and control invasive species and gather public input into program plans and promote partnerships in their implementation.

Center of Expertise

- Coordinate and Implement Prevention Strategies
- Coordinate, Standardize and Manage Monitoring and Mapping Efforts
- Perform Risk Analysis for New Species
- Manage and Prioritize Rapid Response Efforts (Strike Team) Interagency
- Participate and Coordinate with the NISC and Other Federal Agencies
- Develop, Integrate and Implement National Training Program.
- Assist the ISLT with Updating ER's and EP's to be Consistent with IS Policy
- Collaborate with ERDC on Research Priorities and Needs
- Facilitate Tech Transfer from ERDC to the Field
- Facilitate Local and Regional Cooperation Between USACE and Other Agencies, NGOs
- Develop Partnerships to Leverage Funding
- Coordinate with CCO or Public Affairs to Execute Public Education and Outreach.

Sea Grant Invasive Species Activities Update

Dewayne Hollin discussed the following funding opportunity:

2010 NOAA Sea Grant Aquatic Invasive Species ***OPEN***
NOAA Sea Grant will make available $2,000,000 in 2010 and up to $2,000,000 in 2011, if appropriations are available, to Sea Grant programs to support integrated projects of research, outreach, extension, education and/or management, addressing regional aquatic invasive species priorities for U.S. coastal, ocean, and Great Lakes areas. This opportunity seeks especially to support projects that address NOAA-relevant regional aquatic invasive species priorities identified by Sea Grant Regional Research Plans, by NOAA Regional Collaboration Teams, by the Aquatic Nuisance Species (ANS) Task Force Regional Panels, and in ANS State Management Plans. Up to eleven projects of median federal funding $400,000 are anticipated. Some projects selected in this competition may be awarded in 2011 and funded with 2011 funds.

Open to the following Sea Grant Programs and Projects: all Sea Grant Colleges and Institutions, Guam Sea Grant, Lake Champlain Sea Grant, and the National Sea Grant Law Center.

One application is expected per region. Regions are the Sea Grant regions defined in 2006/2008 Regional Research and Information Planning competitions.

Application materials are due **May 17, 2010**.

Proposals may request up to $400,000 in total. (But proposals addressing multiple regions may request up to $400,000 times the number of regions.)

50% Non-federal matching funds are required.

Submit applications to grants.gov.

To obtain the RFP, please visit www.grants.gov, FFO number NOAA-OAR-SG-2010-2002380.

For more information, please see the Question-and-Answer webpage, or send questions to invasive.species@noaa.gov.

Invasive Species Activities in Mexico
Roberto Mendoza

Trinational Risk Assessment Guidelines for Aquatic Alien Invasive Species - Test cases for the snakeheads (*Channidae*) and Armored Catfishes (*Loricariidae*) in North American Inland Waters - Importance:

- At the regional level most efforts have been focused on terrestrial invasive species which have had negative effects on agriculture and human health
- Consequences of intentional or accidental release of aquatic organisms in pristine continental ecosystems were often overlooked
- The CEC, set in motion the Trinational Alien Invasive Species Project
- Trinational consensus was reached to select commercial pathways activities to test the Guidelines
- Aquarium Trade and Live Food were selected as test pathways as they have been recognized internationally and locally as important pathways of potentially invasive fish species.
- Canada agreed to perform the RA with species of the Snakehead group, while Mexico chose to test the Guidelines with species from the Loricariid family.

Lionfish - Confirmed Presence during 2009

- Isla Contoy
- Isla Mujeres
- Cancun
- Cozumel
- Playa del Carmen
- Kantenah
- Sian Ka'an
- Majaual
- Xcalac
- Chinchorro

Collecting Centers

- Only authorized institutions

- Unify procedures and control techniques
- Data quality control
- Final disposal
- No commercial benefit from captured fishes
- Captures and visual detection reported to Collecting Centers
- Volunteer Monitoring System for early detection of lion fish

Mexico's National Strategy

Strategic Actions

1. Review, adequate and develop the present legal framework.
2. Develop scientific, technical and institutional capabilities.
3. Establish the coordination between and within the government, institutions and the society.
4. Foster divulgation, education and public awareness.
5. Generate sound knowledge for decision taking.

Strategic Objectives

1. Prevent, detect and reduce the risk of introduction, establishment and dispersal of invasive species.
2. Establish control and eradication programs of exotic invasive species to minimize or eliminate their negative impacts.
3. Inform the society in an efficient way, so people can act responsibly in the prevention, control and eradication of invasive species.

Amendment to the Wildlife and Ecology Laws - It Defines an Exotic Invasive Species and:

- Prohibits the importation of exotic invasive species or any other wild species that can carry an exotic invasive species.
- Prohibits the release into the wild of exotic invasive species.
- Mandates the creation of a list of exotic invasive species that has to be reviewed every 3 years
- Mandates the creation of a regulation on prevention of entry of these species, management, control and eradication of those exotic invasives which are already established in Mexico.
- Gives the Economy Ministry the power to control transit of these species inside Mexico.

Members Forum

State updates were given for the states of Alabama, Texas, Florida, Georgia, Mississippi, and Louisiana. For more information on their program activities, see each state's website.

North American Invasive Species Network Workshop Overview
Don Schmitz

NAISN Pre-Workshop Survey Results
Centers/Institutes (7)

- 19 Services/programs
- 18 groups of organisms
- 90 full/part-time employees
- All affiliated with universities
- 4 of the 7 have a global audience

Scope of the Network:
Canada, Mexico, and the United States - an all of their protectorates.

Desired Future Condition Statement:
NAISN - A consortium that uses a coordinated network to advance science-based understanding of, an effective response to, non-native invasive species in North America.

Goals:

- A transparent organizational structure.
- Invasive Species Network Hubs act in a coordinated manner.
- NAISN provides reliable resources and services across North America.
- NAISN works across political boundaries in North America.
- NAISN has the resources in place to achieve the DFC.

Committees:

- Alternative Model (NAISN structure) Committee
- Interim NAISN Organizing Committee
- Information Technology Committee
  - NASIN and GISIN Subcommittee

Current Leadership:

- Dr. Robert Leavitt, Chair, Interim NAISN Organizing Committee
- Don C. Schmitz, NAISN Coordinator
- Chuck Bargeron, Chair, Information & Technology Committee
- Jim Graham, Chair, NAISN and GISIN Subcommittee

Action Items:

- Organize Regional Network Hubs
- Survey stakeholders and ID gaps
- NAISN 5 Year Strategic Plan

Definition of Invasive Species Network Hub: Regionally-based, thematic-based, and/or taxonomically-based focus of coordinated invasive species management activities that address common needs and pool resources in response to invasive species issues.

Future Services and Actions:

- Invasive Species Watch Lists
- Coordinate and Track Research
- Track Invasive Species Ranges Due to Climate Change
- Define the Invasive Species Problem in NA
- Connect the Databases (GISIN)
- Coordinate Rapid Response

Website: http://www.naisn.org/

Regulating Exotic Aquatic Plants in Texas
Earl Chilton

Current Status of Exotic Aquatic Plant Regulations

- TPWD has regulatory authority over the importation, possession, sale or placement into water of the state of exotic harmful or potentially harmful aquatic plants.
- TPWD is also authorized to enact rules and issues permits to regulate these activities.
- This authority is granted to TPWD by the Texas Legislature.
- Exotic aquatic plants that have been identified as harmful or potentially harmful are prohibited.
- Plants and rules are listed in TPWD administrative code.
- Some plants can be possessed with a permit (such as water spinach).
- Permits have conditions to minimize environmental risk.

Disadvantages of Current System

- Adding new plants to the list is a lengthy process.
- It is difficult to respond to new threats.
- Non-listed species may be introduced.
- These species can become established before being regulated.
- Environmental damage and economic costs may occur before a species can be listed.

Development of New Regulations

- During the last Legislative session, TPWD was directed to publish a list of exotic aquatic and riparian plants that are approved for use in Texas without a permit.
- TPWD was further directed to make the rules be as permissive as possible without allowing plants that pose environmental, economic, or health problems.
- New rules are to be in place by January 1, 2011.
- The first step has been to develop list of exotic (non-native) aquatic and riparian plants currently imported into Texas.
- TPWD is currently gathering input from persons and businesses and other entities.
- This input will aid TPWD in adding or deleting plants from the current draft list.
- All plants on the list will be evaluated for potential risk to aquatic environments using a scientific risk analysis based on Pheloung et al. (1999).
- If risk is low, species will be placed on the approved list.
- TPWD will maintain a category for possession of some plants by permit only.

What is an Aquatic Plant?

"An aquatic plant is defined as any member of the Kingdom Plantae, any member of the Kingdom Moners within the Phylum Cyanophycota, or any photosynthetic member of the Kingdom Protista, as documented using the most recent posting of the Integrated Taxonomic Information System, and is often found in either aquatic or riparian habitats."

Risk Assessment - Conduct a Literature Review That Includes:

- Native Range
- Native Climate
- History of Invasiveness
- Reproductive Requirements, Potential, and Dispersal
- Control Techniques and Efficacy
- Habitat Requirements
- Economic Benefit
- Environmental Impact If Established
- Agricultural Impact If Established
- History in Texas

Timeline

- After risk analysis, a draft approved list will be developed and made available for preliminary public comment in May and June 2010.
- TPWD will modify current rules to establish new procedures for regulating exotic aquatic plants.

- August 25th meeting - present proposed rules.
- November 4th meeting - vote to approve proposed rules.
- New Regulations go into effect.
- The process for adding new plants to the list will incorporate risk analyses and Commission approval.

What If A Species Is Not On The List? Exotic Species Permits may be issued for:

- Research
- Public exhibits
- Aquaculture
- Vegetation management
- Wastewater treatment
- Industrial purposes?

South Atlantic Council's Invasive Species Activities

Ron Lukens reported that he, Jim Morris, and James Ballard worked with the South Atlantic Fishery Management Council and developed a document (distributed) entitled "Policies for the Protection of South Atlantic Ecosystems from Invasive Species". This document establishes the policies of the South Atlantic Fishery Management Council regarding protection of South Atlantic ecosystems from potential impacts associated with invasive species. The policies are designed to be consistent with the overall habitat protection policies of the Council as formulated in the Habitat Plan (SAFMC 1998a) and adopted in the Comprehensive EFH Amendment (SAFMC 1998b) and the various Fishery Management Plans of the Council. The document is being sent to several advisory panels of the South Atlantic Council and will be considered for adoption at the upcoming meeting.

After some discussion, the Panel agreed with supporting this document. Lukens also indicated that he would encourage the Gulf of Mexico Fishery Management Council to consider a similar document.

Lukens also asked if the Panel could develop a background paper on orange cut coral to provide that information to the South Atlantic Council. The Panel agreed and indicated it would be a good work group session agenda item.

Invasive Species Public Awareness Campaign - Stopping the Spread of Giant Salvinia
Earl Chilton/Leslie Hartman

Invasive Species Campaign

- 2009 Sunset Commission raised issue of exotic aquatic plants and directed the Department to: "provide greater information to the public on the harm caused by releasing exotic species."
- Giant Salvinia (*Salvinia molesta*) the first species to be addressed.
- But we need your help.

Giant Salvinia Campaign

- Public Awareness Campaign
  - Primarily in East Texas
  - Focus at the Following Lakes:
    - Toledo Bend Reservoir
    - Caddo Lake
    - Lake Sam Rayburn
    - Lake Conroe
- Strategy: Multi-media Campaign
  - On-the-Ground
  - Broadcast and Print
  - Online
  - TPWD Vehicles
  - Fishing Events
  - Media Events

Website

- www.texasinvasives.org
  - Partnership with Lady Bird Johnson Wildflower Center
- New Features
  - Invasives 101
  - Eco-Alerts by Region

Media Events

- Kickoff News Conference - April 1
  - Carter Smith and TPW Commissioners to announce the launch of the Giant Salvinia Public Awareness Campaign at Lake Austin boat ramp
- Media Tours/Field Days
  - Sheldon Lake
  - Caddo Lake
  - North Toledo Bend

Invasive Species Advisory Committee Update
Earl Chilton

During the December 2009 ISAC meeting in Washington, DC the following action items and recommendations that may affect aquatic plant management were discussed and proposed:

1. Recommendation 2 (from the Research and Information Management Subcommittee):

Federal support for research on the management of invasive species in natural systems.

ISAC recommends that NISC agencies develop strategic plans and implement mechanisms for sustained support of research on the management of invasive species in natural systems, including prevention, control, and restoration. Agencies might approach this by broadening the scope of existing programs, reallocating resources between or within programs, or adopting policies for the consistent inclusion of management of invasive species in requests for proposals for research on natural ecosystems.

2. Recommendation 4 (from the Control and Management Subcommittee):

ISAC recommends that federal biological control programs, as well as research performance measures, incorporate IPM principles with the goal of achieving the greatest potential for successful management of the target pest, while maximizing the desired ecosystem functions and other appropriate management objectives. This includes incorporating niche based modeling, monitoring procedures, efficient data access, and integration with other control options and/or active restoration efforts, where necessary.

Additionally, ISAC members have drafted a paper on the biofuel and invasive species.

Aquatic Nuisance Species Task Force Update

James Ballard discussed current activities of the ANSTF:

- Discussed three RFPs: 1) $1.075 million for state/interstate plan implementation funding (proposals supporting almost all of ANSTF-approved plans were received), 2) $600,000 for quagga/zebra projects identified in state/interstate plans (proposals supporting around 60% of the plans were received), and 3) $600,000 to support three priorities in QZAP (these are due by April 19).

- Developed a QZAP Federal coordination team. This team will oversee coordination of QZAP at the federal level.

- Developed a letter for the ANSTF co-chairs to send to the heads of the ANSTF Federal member agencies, encouraging support for QZAP implementation.

- Working with FWS Office of Legislative Affairs to schedule a QZAP briefing with Senator Feinstein's staff.

- The ANSTF co-chairs began meeting with ANSTF members individually to discuss means of increasing coordination and ANSTF effectiveness,

- The ANSTF website is being updated.

- HAACP training was provided to Washington Office NOAA and FWS personnel.

- Disseminated approval letters for the new Utah, MN, Lake Tahoe, and SC ANSTF-approved plans.

- Provided a presentation on the ANSTF at National Invasive Species Awareness Week.

- The FWS Branch of Aquatic Invasive Species has a Knauss Fellow for a year who is helping to address ANSTF tasks, including following up on implementing the ANSTF Strategic Plan priorities developed at the fall 2009 ANSTF meeting.

- Reviewed the draft MS state ANS plan and submitted comments to them.

- Prepared for the May ANSTF meeting in Portland, Maine.

Overview of Revised Rapid Response Plan

Leslie Hartman provided a PowerPoint presentation on the revised rapid response plan. Dennis Riecke, Don Schmitz, and Marilyn O'Leary agreed to help with the review process. All other states were encouraged to review the document and provide comments to Leslie.

Recruiting Service Organizations as Monitors for Non-native Species
Chuck Jacoby

Augmenting Early Detection Systems with Volunteers - Outline

- Brief History
- ED Guidelines
- Care & Feeding of Volunteers
- Musings on an Approach
  - Targets

- The Hook
- Process

• Question - What can/will we do as a Panel and via our organizations.

Discussion of the GSARP's 2010-2014 Strategic Plan

Ballard mentioned that the Strategic Plan was thoroughly reviewed at the last meeting. All changes have been incorporated and the document has been available on the Internet for review. He also added that this is a living document and subject to change as needed.

Paul Carangelo made a motion to approve the GSARP 2010-2014 Strategic Plan. The motion was seconded by Dewayne Hollin and approved unanimously.

Work Group Membership

Membership on the Panel Work Groups were reviewed and amended. Current membership is as follows:

Pathways/Prevention
Pam Fuller: Chairman

Earl Chilton
Pam Fuller
Dennis Riecke
Harriet Perry
Paul Carangelo
Don Schmitz
Nicole Cass
Tom Jackson
Jeff Herod
Keith Weaver

Eradication/Control/Restoration

Earl Chilton
Roberto Mendoza
Ralph Allemand
George Ramseur
John Teem
C. Furqueron

Research/Development
John Teem: Chairman

Herb Kumpf
Pam Fuller
Marty O'Connell
Leslie Hartman
John Teem
Harriet Perry
Earl Chilton
David Knott
James Morris
Don Schmitz
Jacoby Carter
Diane Altsman
Susan McCarthy

Education/Outreach
Chuck Jacoby: Chair

Don Schmitz
Marilyn O'Leary
Lisa Gonzalez
Chuck Jacoby
Roberto Mendoza
Herb Kumpf
Dewayne Hollin
Jeff Herod

Early Detection/Rapid Response

Pam Fuller
Marty O'Connell
Paul Carangelo
Scot Hardin
Chuck Jacoby
Harriet Perry
Leslie Hartman
Earl Chilton
Marilyn O'Leary
David Knott
Mike Brainard

Dennis Riecke
Chris Furqueron
Ralph Allemand

Information Management

Don Schmitz
Pam Fuller
Ron Lukens
James Ballard
Mike Brainard

Other Business

The Panel discussed the vacant seat formerly held by David Yeager. Nominations will be held at the next meeting. Ballard ask that Panel members contact anyone they wish to nominate to be sure they will be willing to serve.

Next Meeting Time and Place

The Panel agreed that St. Petersburg, Florida would be the next meeting location at the end of October 2010.

Public Comment

Chairman Ron Lukens once again provided the opportunity for public comment. No public comments were received.

There being no further business the meeting adjourned at 4:45 pm.