

SDAFS Alligator Gar Ad-hoc Technical Committee Meeting
Minutes
Thibodaux, Louisiana
26 May 2010

Meeting opened at 3:40 pm by Ricky Campbell.

Old Business

Minutes of last meeting (2009 in New Orleans, Louisiana) accepted by all in attendance (Lee Holt – motion to accept, Quenton Fontenot – seconded motion).

New Business

- Procedure for becoming standing rather than ad hoc committee – Steve Lochmann (SDAFS President-Elect) will send revised by laws to SDAFS Executive Committee (ExCom). ExCom will vote.

- Revised by laws were accepted by all in attendance of the Ad-hoc Technical Committee (Quenton Fontenot – motion to accept, Ricky Campbell – seconded motion).

Committee web-site (<http://www.sdafs.org/alligar/index.html>) update by Lindsey Lewis (Lindsey_Lewis@fws.gov).

- Lindsey will accept photos, information, bibliography entries, videos, corrections, suggestions for website. Please send by e-mail or mail a cd/dvd if file(s) are too large for e-mail. Goal is to make the website the most comprehensive site for information on alligator gar for use by scientists and the public. Unpublished data/studies can be sent to Lindsey for addition to the website. If there are any corrections or updates to the conservation status form and map, please send to Lindsey. Information on other gar species is needed including photos, identification information, distribution maps, etc.

State, Agency, University Updates

- Alabama – Ryan Peaslee – AL Wildlife and Freshwater Fisheries tank spawned alligator gar this year but the fertilization rate was low, producing approximately 4,500 fry. Currently possess approximately 3,000 two to four inch juveniles. Goal is to produce 1,000 individuals for stocking. Dave Armstrong – Will work with Ricky Campbell to coded wire tag juveniles before release.

- Arkansas – Lee Holt – AR Game and Fish Commission is reviewing the state's alligator gar management plan. The management plan will be an evolving document. New regulations (1 fish/day with a free alligator gar harvest permit and no harvest of fish >36 inches from 1 May to 1 July) started 1 January 2010. Game and Fish developed gar related educational materials for public. Game and Fish is sampling the Red River for alligator gar.

- Florida – Not represented. No one has been designated to represent Florida on the Technical Committee. Harvest moratorium in FL. FL Fish and Wildlife Conservation Commission is developing an alligator gar management plan.

- Illinois – Not represented, covered by Ricky Campbell – Trent Thomas has developed a reintroduction program. Illinois Department of Natural Resources has gathered a lot of background information. The restoration stocking will intensively culture 10,000 fry produced at Private John Allen National Fish Hatchery (NFH) at two state hatcheries.

- Kentucky – Not represented, covered by Ricky Campbell – KY Department of Fish and Wildlife Resources has developed an alligator gar management plan. In 2009, the Department obtained fry from Private John Allen NFH and stocked approximately 4,000 tagged individuals in the western part of the state.

- Louisiana – Not represented, covered by Allyse Ferrara – Eric Shanks, the designated LA Department of Wildlife and Fisheries committee representative, had planned on attending meeting but was unable due to travel restrictions.

- Mississippi – Not represented, covered by Ricky Campbell – MS Department of Wildlife, Fisheries, and Parks does not currently have an alligator gar management plan. The Department obtained fry from Private John Allen NFH for rearing trials. Once the trials are complete the juveniles will be returned to Private John Allen NFH for tagging and stocking in TN. The Department will conduct a population assessment in northern MS.

- Missouri – Not represented, covered by Ricky Campbell – Chris Kennedy, Missouri Department of Conservation, is continuing work in Mingo Swamp. Chris wants to stock large alligator gar to control silver carp. Gastric lavage will be used to assess use of alligator gar to control silver carp.

- Tennessee – Jim Hamlington – New TN Wildlife Resources Agency, Fisheries Division Chief, Bobby Wilson supports alligator gar work and monitoring. TWRA obtained fry from Private John Allen NFH for stocking. TWRA has worked with Tennessee Tech U. to tag juveniles and may work with university for monitoring.

- Texas – Nate Smith – One fish per day bag limit began 1 September 2009. Current projects include telemetry project on Trinity River, tag and release with recreational guide Captain Kirk Kirkland, population estimate in upper Trinity River, validation of age and growth using OTC injected alligator gar, longnose gar, and spotted gar. Contaminants data will be available this summer. Bill Karel (Coastal Division) is conducting genetic analyses. Dan Bennett – Currently working with bowfishing groups and will estimate bow harvest.

- Nicholls State University – Allyse Ferrara – Current and recent projects include spawning captive broodstock in collaboration with Louisiana State University, assessment of control of invasive tilapia by native predators including alligator gar using gastric lavage, production of spotted gar larvae for genetic work by University of Oregon Neuroscience Center, production of

Florida gar for Miccosukee Tribe, and comparison of larval and juvenile feeding regimes, larval rearing densities, and salinity tolerance of alligator gar.

- Mississippi State University – Peter Allen – Dan Schwarz will present proposed salinity work on Thursday. Will examine physiological changes associated with different salinities.

- University of Southern Mississippi – Brian Kreiser – Accepting tissue/fin clip samples from all gar species for genetic analyses. Can send sample collection tubes if needed.

- University of Arkansas at Pine Bluff – Steve Lochmann – Obtained fry from Private John Allen NFH and has several projects planned for this season.

- University of Central Arkansas – Ed Kluender – (working with Lindsey Lewis) tracking tagged alligator gar, looking for additional alligator gar populations and spawning grounds, determine age structure of population and will expand efforts beyond the Fourche LaFave River.

- University of Michigan – Solomon David and Bill Glass from the University of Windsor – working with spotted gar to compare populations from different latitudes, comparison of lethal and non-lethal ageing techniques.

- University of Oregon Neurosciences Center – John Postlethwait and Angel Amores – have developed thousands of DNA markers in spotted gar. New procedures are much cheaper than microsatellite procedures.

- USFWS, Private John Allen National Fish Hatchery – Ricky Campbell – In early spring 2010, USFWS personnel made several trips to St. Catherine Creek National Wildlife Refuge near Natchez, MS, to deploy Vemco (ultrasonic) receivers and to tag 20 alligator gar. Receivers were deployed to cover areas at the Mississippi River up to spawning grounds. Kayla DiBenetto is analyzing movement data and is finding trends similar to telemetry work done in Arkansas. This spring, 13 broodstock (6 female and 7 male) alligator gar were injected with LHRHa and few eggs were produced. A second batch of broodstock were collected and produced approximately 198,000 eggs. Fry were produced for TN, MS (will send fish to TN), MO, OK (will send fish to MO), IL, KY, Warm Springs Regional Fisheries Center, and several universities.

- USFWS, Arkansas Ecological Services Field Office – Lindsey Lewis – received approval and funding from the FishAmerica Foundation to improve alligator gar passage through culverts leading to identified spawning areas. Banks surrounding culverts will be armored to reduce sedimentation. Partners include NRCS and AGFC Stream Team. NRCS Wetlands Reserve Program (WRP) will be used to protect spawning areas in fallow fields. Use of WRP to protect warm season grasses used for spawning.

- USFWS, Warm Springs Regional Fisheries Center – Jaci Zelko – each year Warm Springs has improved larval/juvenile alligator gar culture techniques (2009 – density experiments; 2010 – feed experiments). Will work on alligator gar culture manual (similar to poster presented at this meeting). Other projects include reduction of cannibalism rates, sperm processing and preservation, egg de-adhesion. Carlos Echevarria – many of the techniques and much of the

information used in the culture of alligator gar has come from the work of our Mexican colleagues working with alligator gar and tropical gar.

Guest Speaker

Ricky Campbell - Landscape Conservation Cooperatives (LCCs) – to include USFWS, other federal agencies, academics, state agencies, etc. Introduced guest speaker Bill Uihlein – Interim Coordinator of the Gulf Coast Plain/Ozark LCC - “Landscape Conservation Cooperatives: Sustaining Our Nation’s Fish, Wildlife, and Cultural Resources.”

Oil Spill Update and Data Needs

Glenn Constant – USFWS – Potential impacts of Deepwater Horizon oil spill on alligator gar populations - habitat impacts of oil spill must be quantified, which variables to be monitored or quantified must be determined and a monitoring plan developed. Alligator gar are a trust resource therefore the impacts of the oil spill will be determined using the Natural Resources Damage Assessment (NRDA) process. Must determine what is included/measured by the NRDA process (impacts on coastal spawning and juvenile habitats, adult habitats, etc.) and how to measure/monitor. Types of data needed for NRDA process include various tolerance levels, quantification of coastal spawning, juvenile, and adult habitats, temperature preferences and tolerances, toxicity of oil spill components and dispersants. NRDA must document injury at any level (reduced fecundity, habitat quantity and quality, behavioral changes, physiological changes, prey abundance, etc.). Initial data input for NRDA can be bullet points for inclusion in a Gulf-wide modeling effort.

Open Discussion

Ricky Campbell – next SDAFS Spring meeting is in Tampa, FL (<http://www.sdafs.org/meetings/2011/default.htm>), 13-16 January 2011. Technical committee should start planning 2011 meeting soon.

Steve Lochmann – full technical committee status can be approved within a few weeks.

Meeting Adjourned 5:42 pm (motion - Quenton Fontenot, second – Lee Holt).

Treasurer Report (not given at Technical Committee meeting)

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| Balance prior to expenses/deposits for 2010 meeting | \$610.00 |
| Expenses for 2010 Ageing workshop | - \$177.28 |
| Deposits for 2010 Ageing workshop | <u>\$375.00</u> |
| Balance as of June 2010 | <u>\$807.72</u> |

Minutes and treasurer report compiled by Allyse Ferrara