

**100th Meridian  
Colorado River Basin Team Meeting  
January 17, 2003  
Lake Mead NRA, Boulder City, Nevada**

The meeting was chaired by Bob Pitman, USFWS, Albuquerque. Notes by Tina Proctor, USFWS, Denver.

**NEXT MEETING: SALT LAKE CITY, JULY 22**

- 1. Welcome and thanks to Josh Hoines, NPS  
Introductions**
- 2. History of 100<sup>th</sup> Meridian and the Colorado River Basin Team**

**What supports zebra mussels – Bob McMahon**

- Need calcium
- pH – need no acidity
- Temperature – don't tolerate water above 30 degrees  
e.g. don't have zm's in Texas because surface water is above 32 degrees in the summer.
- Not tolerant of low oxygen
- Tolerant of turbidity
- Young zm's like shallow water
- Can't be exposed to air very long – one treatment is to draw lakes down and expose them, either by freezing in winter or drying out in the summer.
- Can be found in deep reservoirs as long as there is enough oxygen
- Same requirements as Asian clams

**How ZM's might come into this region**

- Recreational boats
- Equipment being transported from infested water
- Divers – equipment or planting zm's on purpose because they are excellent at clarifying water
- They do well in impoundments and associated rivers
- It is hard to predict. They are not numerous in the Tennessee River although it seems like good habitat. They are in the Arkansas River in Oklahoma even though it seems it should be too warm.
- Need to pay attention to the smaller reservoirs in this region also – will get carried downstream as larvae

**Bob suggested that there is a need to look at all the physical parameters of the reservoirs along the Colorado River and decide what the risk level is.**

**3. Action Items from last meeting in Grand Junction, CO in July, 2002**

- Economic study – more on this topic later in the meeting
- Stop ANS signs have been put up all along the Colorado River drainages.
- Protect Your Waters Stickers – Bob will provide
- Contract with UNLV to do surveys at Lake Mead, Mohave and Powell – started by Dr. Gertsenberger at UNLV – presentation later in the meeting.
- Put Clean Your Boat video on website – not done yet. David needs a copy of the video.
- 100<sup>th</sup> Meridian Watch Cards – Bob took pictures this week which will be used to create the Watch Cards
- Table top display – not completed.
- Create NZMS sign – not completed.
- Rapid Response Plan – CAL-FED is developing a Rapid Response plan on zm's – draft outline completed.

**4. 100<sup>th</sup> Meridian database – David Britton**

David gave an update on boater interviews and trailer counts. He has analyzed the data to determine where boaters are from and where they are going. One idea is to make a list for all the major lakes to show where the boats are coming from and where they are going to. Hot spots can be identified.

David is collecting website activity statistics. For December 2002, there were 1,555 people using the site. Total hits were 10,777. Average time spent is about 60 seconds. Only 2.6% are coming from search engines. 40% come from other pages. 90% look at one page. Biggest referrals from Google, Yahoo and About. David put the left hand buttons on each page, to encourage people to spend more time on the site and make it easier to navigate.

[Britton@uta.edu](mailto:Britton@uta.edu) – please contact David with ideas on the site or to add items.

Shawn suggested that we put a message on the website which says “Feel free to link to this site, please let us know” and then give them information about how to contact.

**5. Surveys on the Lake Mead – Dr. Shawn Gerstenberger, University of Nevada, Las Vegas**

Students sampled 10 launch sites along Lake Mead, starting in October. So far, they have sampled 1871 trailers. 65% of the boats are from Nevada, followed by CA, AZ, UT, and Idaho. There have been boats from 26 different states so far. No zm's have been found so far, although there has been vegetation from Kansas. Shawn gave breakdowns by month and site. He is still waiting for approval from NPS to do the personal interview surveys. Shawn and his students will continue the surveys during the warm winter months.

**Action: Put the PowerPoint slides on the website.**

Department of Environmental Studies requires a Senior Thesis. Many of these students could do some of the projects that are suggested at this meeting.

Bass tournament anglers for the most part are very knowledgeable about aquatic nuisance species.

**6. Stakeholder groups**

**Action: Regulations for Bass Tournaments will be put on the website.**

Wen Baldwin from Lake Mead Boat Owners Association could not make the meeting. Bob read some information about Wen's activities. Wen has been putting on presentations for various groups including the Coast Guard Auxiliary. Marina operators at the meeting were concerned about zm's and Wen arranged for them to get Zap the Zebra brochures and Stop ANS signs. He shared his presentation with Deanna Pflieger from Arizona Game and Fish who will be using it for classes she teaches.

Wen is working with Lake Mead marinas, but needs to get a sign that the NPS will allow. He has been told that the NPS graphic arts folks are working on a design. He has also placed Zap the Zebra brochures in dispenser displays at various locations such as bait shops, boat dealerships and repair shops.

Wen is interested in getting in to the schools and wonders if there is any middle school level material available. This man is on the move! He can be contacted at [wenbald@earthlink.net](mailto:wenbald@earthlink.net).

**Action : Create a boat inspection training on video or CD that can be distributed. Does Minnesota or Michigan have something already?**

Municipal Water Users  
Hydropower plant operators  
Bureau of Reclamation

Talk to Bill Karsell at BOR in Denver or Bob Johnson's office at regional office in Boulder City.

Visitors Centers

Dive shops

Jon will attend the Colorado River Fish and Wildlife Council to remind them about ANS issues – April meeting. Coop Fish Unit at University of Arizona, Scott Bonar, has an interest in zm's – may be able to get him involved.

## **7. Economic Analysis – Bob Pitman**

Bob contacted Dr. David Lodge at Notre Dame University to do an economic study of the impact of zm's in the west. This will be an expensive study, covering three river systems. Dr. Lodge has written a proposal to be reviewed by Sea Grant. We are looking for partners. Sea grant requires a one-third non-federal match. Depending on funding, we may just limit the study to the Colorado River. Shawn suggested that Dr. Helen Neal at UNLV would be a good contact also.

## **8. Watch cards for boaters – Bob Pitman**

Bob took pictures of a recreational boat with people doing inspections. The group gave suggestions to Bob about which picture might work best for a watch card. The card would be targeted toward recreational boaters in the Colorado River basin. Boater Alert! There was also a discussion about having pictures that fit other river basins also. The inside message would be the same.

## **9. State DOT's or Ports of Entry**

**Action: Develop training materials targeting staff at Ports of Entry which would affect commercial boat haulers. Tina will work on this project.**

There was a discussion about what we have on the website and it was decided that we get information on the website from states that are collecting information at this point, such as Washington and California.

## **10. Lake Powell Update – Mark Anderson**

Boats are identified as they enter the Park and are given coupons for a free boat wash. In 2001, 13 boats got identified – 9 got washed. In 2002, 31 boats got identified, 29 got washed. This year the superintendent agreed that it would be mandatory that boats that are identified must be washed for the 2003 season. Mark put "Stop" zebra mussel signs out and it was decided that signs already up could stay but no new signs could be put up because they didn't meet NPS standards

Zebra mussel substrates (from Portland State University) put out in the lake and are being checked regularly.

Page, AZ zebra mussel group meets every 6 weeks. Benefits are the increase in knowledge by local people about zm's. Mark developed a poster that he gives out to interested folks. He also distributed Public service announcements that can be seen in between movies at the coffee shop. The NPS concessionaire, Aramark, produced a zm costume! Mark produced a flyer specifically for Lake Powell about ANS.

Mark passed a vial of NZMS from the Colorado River near Lake Powell. The snails had been mis-identified for 7 years. Densities of 40,000 per square meter have been found. Mark has been looking in tributaries and hasn't found any NZMS.

Tina will be leading a working group to develop a NZMS Management Plan for the ANS Task Force.

#### **11. Missouri River Lewis and Clark Project – Bill Zook**

A meeting is scheduled in March in Pierre, SD to determine what steps need to be taken to reach Lewis and Clark travelers. Bill met with all marina operators along the Missouri from Omaha to Fort Peck, MT. He sent a letter out yesterday asking them to comment on possible cooperative outreach projects. One idea is to encourage people to fill out a boater survey card with a \$3-5,000 reward at the end. A goal would be to sign every access on the River. Other ideas include sign sharing, Traveler Information Systems and donated advertising in national boating, fishing, boating and Lewis and Clark publications. Another suggestion is to buy banners to indicate power washing availability, which most marinas already have. The Missouri River Team will also consider purchasing display cases and bulletin boards for cooperating marina in exchange for their commitment to use at least half of the space to display ANS materials.

#### **12. NPS – Kent Turner**

The fee collection stations will have a questionnaire for boaters. When they have boat washes in place, they will have the same coupon program that Lake Powell has. Ken handed out a zm prevention Program hand-out.

NPs will put out Protect Your Waters poster which is modified to NPS standards at the nine developed boat launch areas. He wants to get a local group organized, including Southern Nevada Water Authority and BuRec. A suggestion is to include Zap the Zebra brochures with mail-in boating registration and with information about fishing tournaments. Kent will pass out information at the NPS Colorado River working group at the end of February.

### **13. Jon Sjoberg**

No new ANS in Nevada. Nevada is providing public information – hand-outs through offices and walk-in boat registrations. There is boat ramp signage at new locations. Nevada is starting a program which will require a boat operator's license which will have an ANS component. Much effort is being spent right now on tilapia which have spread throughout Lake Mead. Australian crayfish are spreading – brought in for aquaculture. They can be purchased over the Internet. A big concern in Nevada is warm water species that thrive in warm water springs. They are doing routine pet shop inspections and are keeping track of what is being sold.

**100<sup>th</sup> Meridian Colorado River Team  
Lake Mead NRA  
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**Attendance**

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