

## Lake Gaston Technical Advisory Group

### Minutes January 06, 2007 Meeting NC Wildlife Building Raleigh, North Carolina

#### Attendance

Rob Richardson (chairman), Rob Emens (secretary), Vic Dicenzo, Shaun Hyde, Greg Cope, Lloyd Hipkins, Chris Cheek, Kirk Rundle, Brian McRae, *Mike Smart, Mike Grodowitz, Chris Horton, Glen Bishop*

Also; Mark Heilman, Bob Lohr, *Pete Deschenes*

*Italicized names notate attendance via conference call*

#### Agenda

- 1) Elect a secretary for meetings
- 2) Web site / list serve update [Draft page: <http://www.lgtag.ncsu.edu/> ] (Steve Hoyle)
- 3) Create recommendations for intensive treatments to reduce weed populations (Group)
- 4) Present "Lake Gaston Treatment & Revegetation Evaluation Component" - Hyde proposal for intensive management. (Hyde)
- 5) Scope and implications of current lynchbya infestation (Group, with strong input from Madsen and Smart)

Dr. Richardson brought the meeting to order.

I. First item on the agenda was addressed. Mr. Emens was nominated to act as secretary for the TAG. A vote showed all in favor of the nominee and so it was done. No term time expectation or limit was discussed.

II. Second item on the agenda was addressed. Mr. Hoyle announced that the Gaston TAG web-site is up and running. The site is public and its purpose is to provide information about the weed control efforts and operations occurring at Lake Gaston. Members of the TAG are expected to provide current events and reports on the operations they are conducting/ overseeing at the lake for posting on the web-site.

Mr. Hoyle also alerted the group that the status of the list-serve is operational. This is a TAG "members only" based and secure list-serve. The purpose is to provide the group with a communications portal.

The discussion moved to specific types of documents that should be included on the web-site:

1. It was decided that meeting minutes are to be included and a protocol and timeframe was established [minutes are to be circulated within TAG using the list-serve - any revisions needed

are to be completed within 7 days - after that the minutes are to be posted to the web-site].  
2. It was decided that all reports regarding Gaston posted on the ACOE web-site should be linked to the TAG web-site.

III. Fifth item on the agenda was addressed. ACOE personnel informed the group that the data collected from the fall survey has not been reviewed. A brief discussion of lymngbya acknowledged the groups awareness of the presence of this filamentous algae in Gaston and concern about the apparent increase in biomass. A general consensus was expressed towards re-vegetation projects as an important step in aquatic weed management.

ACOE personnel informed the group that federal funding has not yet been approved for FY07. This means that no funding for Gaston is available at this time and ACOE personnel are currently operating on a Continued Resolution Authority (CRA) which will expire on Feb. 15th. The CRA may be extended but that funding will not support any research projects.

Mr. Diczno asked if the grass carp telemetry money has been sent to ARF. Dr. Smart confirmed this transfer of funds occurred. VA Tech in cooperation with VDGIF & NCWRC intends to use these funds (\$70K) for a grass carp monitoring study (seasonal movements, emigration, etc.). Twenty five (25) grass carp are to be outfitted with radio-tags and released into Lake Gaston this spring. Mr. Diczno announced that VDGIF will also capture, tag, and release back into Gaston fifteen (15) additional carp (introduced from previous years) as part of the monitoring study.

IV. Pursuing the discussion of grass carp, Dr. Richardson directed the group to project the number of grass carp that would be considered for stocking in 2007. Without the results of the fall '06 survey TAG agreed that only an approximate number could be calculated at this time. Some assumptions were made:

1. Hydrilla infestation is currently 3,000 acres
2. No private stocking and no emigration or immigration
3. Number of carp present from previous stocking is approximately 21,000 fish (cumulative previous stockings minus 20% mortality per stocking)

To maintain a density of 10 fish/acre of infestation, approximately 9,000 grass carp would need to be installed this spring. The assumptions will be revised to increase precision of the stocking model as data from yearly vegetation surveys and the grass carp research allows.

**Action Item:** TAG secretary is to draft a statement directed to the LGWCC recommending 9,000 sterile grass carp be installed this spring, with a caveat expressing the total is only "ball-park" figure which will be adjusted accordingly once the TAG reviews the fall 2006 survey.

Mr. Hipkins asked "What the highest number of grass carp was in the lake at any time?" The question went largely unanswered, although Mr. Emens provided a list showing some known carp installations. Referencing this list, there was a standing population of 25,392 carp at one time (2003), plus some unknown number of fish that may have survived previous stockings. See list below for recent installations:

Year Number of grass carp installed  
2003 25,392  
2006 7,000

V. The fourth item on the agenda was addressed. Mr. Hyde summarized the Lake Gaston Treatment & Re-vegetation Evaluation Component and discussion followed. The discussion led to some questions about the biological strategies that hydrilla uses:

1. Does the hydrilla in Gaston behave as a perennial (re-growth arising from crowns), or as an annual (re-growth arising from turions and/or tubers) and is there a consistency regarding these strategies between the monoecious and dioecious biotypes?
2. What percentage of new tubers germinates the following year and consecutive years, and is there a consistency regarding this strategy between the monoecious and dioecious biotypes?

Tuber monitoring was identified as an important practice. Tuber monitoring may unveil the answers to some of these questions, and offer some qualitative insight to the efficacy of control operations. Furthermore, sediment type must also be considered during the site selection process to enable tuber collection.

Re-vegetation issue was re-visited. Discussion led to more questions:

1. How can re-vegetation fit into a consecutive year treatment approach?
2. Can re-vegetation be successful if plants are installed the summer following a spring treatment w/ fluridone?
3. What plants (suitable to Gaston) have high tolerance to fluridone?

Mr. Hyde commented that SePRO can conduct studies on various native plants to discover fluridone tolerance values.

The TAG agreed to pursue the Treatment & Re-vegetation Evaluation Component, and intends to present this approach to the LGWCC as funding from the Council may be needed (especially if federal funding does not become available).

VI. March meeting agenda items suggested:

1. Re-vegetation efforts
  - a. Prison farm will likely be in production and have plants available as early as this year.
2. Year-end survey 2007
  - a. What type (aerial/remote sensing?) and who will perform tasks?
3. Regulations on lakefront properties
  - a. Mandatory buffer zones? Minimum vegetated shoreline (native species) percentage?
  - b. Who would implement and enforce?

Adjourn until March

Prepared by:

Rob Emens, Secretary  
Gaston TAG

**Footnote to minutes:**

1. As a follow up to questions during this TAG meeting, Dr. Richardson learned from Dr. Kurt Getsinger, U.S. Army Corps of Engineers, that the Lake Gaston flow study is planned for 2007. This, of course, will be pending the USACOE budget although it may still happen if funding at a reduced level than expected occurs.
2. As a follow up action item Mr. Rundle will research records of grass carp stockings into Lake Gaston prior to 2003. Some minor discrepancies were discovered when referencing historical documents from various agencies. A report will be provided at the meeting in March.

**Follow-up:**

Rough calculations during the Jan 9, 2007 TAG meeting showed approximately 21,000 grass carp in the lake at the end of 2006, which equates to 9,000 allowed for stocking in 2007. However, after actual calculations with the cohort analysis 23,283 grass carp were determined to be in the lake at the end of 2006. This equates to 6,717 grass carp allowed for stocking this spring based on the 10 fish/acre of hydrilla and 20% annual mortality. Sorry for any confusion. All of this is based on the estimated 3,000 acres of hydrilla remaining in the fall of 2006 and estimates could change quite a bit anyhow, pending a final number from the Corp of Engineers.

**Attachments:**

[NC Wildlife Resources Commission Grass Carp Permitting Protocol for Lake Gaston 2007 Lake Gaston Grass Carp Cohort Analysis - NCWRC PDF Format](#)