Goal-Driven Collaboration within a Workgroup
Rick Morin
September 2010
History of the Turtle Fishery

- Used as food by Native Americans in Chesapeake Region
- Used in colonial America by settlers and slaves
- Recorded commercial activity in live snapping turtles in 1873 (Cope)
- Fishery unmanaged for next 100 years
- Earliest regulations were county season limits and gear restrictions to prevent piercing any part of the turtle
- Increased international demand 1990’s to present
- Agency authorized by enabling legislation in 2007 to develop regulations to manage snapping turtles
- Formation of snapping turtle workgroup 2007
- Interim regulations 2008
- Permanent regulations 2009
Harvest Reports to Fisheries Service
Options when knowledge is limited

A. Allow status quo
B. Ban all harvest
C. Consider alternatives for sustainability that allow a limited fishery based on science
Going Beyond Informed Consent*

- Inclusion of stakeholders
- Education of harvesters without lecturing
- Honesty about what we know and don’t know
- Partnerships in collection of data
- Spirit of cooperation and collaboration
- Willingness to listen and compromise
- Open Meetings

* Informed Consent: “The grudging willingness of opponents to “go along” with a course of action that they actually are opposed to” – Hans Bleiker, 2008.
Formation of Snapping Turtle Workgroup

Composition:
- MD DNR Fisheries Service, co-chair
- MD DNR Wildlife and Heritage Service, co-chair
- MD Natural Resources Police
- Towson University
- University of Maryland UMCES, Chesapeake Biological Laboratory
- National Aquarium in Baltimore
- Chesapeake Bay watermen, MWA
- Mid-Atlantic Turtle and Tortoise Association
- Conservation International/IUCN
- Seafood Dealer, Turtle DeLuxe
- Aquaculture, R&R Aquafarms
- Nuisance Wildlife Control Operators and Maryland Trappers Association
SCI FI SATURDAY: THE MOST DANGEROUS NIGHT ON TELEVISION
THE SCI FI ORIGINAL MOVIE
SNAPPING TURTLE: TOOTHLESS DANGER
They thought it was safe to go in the water, but OH SNAP were they ever wrong.
LORENZO LAMAS  JOHN RHYS-DAVIES
2007 Workgroup Recommendations

- Establish interim 9.5” minimum size limit
- No closed season
- Data collection - research highly recommended
- Recreational take possession limit
- Limits on pets and personal use
- No sale with nuisance permits
- No limited entry
- Clarify existing regulations: specify tidal harvest only
- Increase enforcement
- Continuation of the workgroup
Interim regulations in place for 2008:

- Size limit: 9.5” minimum CCL
- Commercial license required to harvest
- New Snapping Turtle Permit Required
- Harvest Reports Required
- Harvest allowed in tidal waters only
## Snapping Turtle Management in Maryland

### Snapping Turtle Harvest Rules

A person may not harvest or possess a snapping turtle from the nontidal waters of the State for commercial purposes.

- **Size**: A person may not harvest or possess a snapping turtle from the tidal waters of the State for commercial purposes that has a carapace length that is less than 11 inches.

- **Gear**: A person may not catch a snapping turtle from the waters of the State by the use of a hook and line, trotline, bow and arrow, spear, trap or gig, or any other device capable of piercing any part of a turtle.

- **Season**: Open year round in all areas except the tributary waters of Charles County. A person may not catch or attempt to catch snapping turtles in the tributary waters of Charles County from April 15 to May 31, inclusive.

- **Permit**: A person catching snapping turtles for commercial purposes shall have a valid snapping turtle permit issued by the Fisheries Service in possession while harvesting or transporting snapping turtles and be licensed to catch snapping turtles for commercial purposes in accordance with Natural Resources Article, §4-701, Annotated Code of Maryland.

  - Permits issued by the Fisheries Service shall be valid beginning on January 1 and expiring on December 31 each year.
  - Permits issued by the Department are not transferrable, unless transferred with a commercial tidal fish license in accordance with Natural Resources Article, §4-701, Annotated Code of Maryland.
  - A person permitted by the Fisheries Service to harvest snapping turtles shall complete all information on the snapping turtle permit cards and submit the completed permit cards to the Fisheries Service monthly and all permit cards by January 15 following the permitted season.
  - Snapping turtle harvest shall also be reported on the Daily Commercial Fishers Catch Log and returned to the Department monthly.
  - An individual who has not provided to the Fisheries Service all permit cards with complete information is not eligible for a permit to participate in the snapping turtle fishery for the next calendar year.

### Measuring a Snapping Turtle

**Curved Carapace Length**

Measure the length of a snapping turtle along the curvature of the carapace (top shell) with a flexible tape measure that conforms to the snapping turtle’s shell from the nuchal scute (the scute directly behind the turtle’s head) to the base of the notch where the two most posterior scutes meet.
### Effects of Size Limits

P. Cain study, 2008 Nanticoke R

<table>
<thead>
<tr>
<th>Size Limit CCL inches</th>
<th>Size Class Protected</th>
<th>% Females Protected</th>
<th>% Males Protected</th>
<th>% M + F Protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5</td>
<td>0 - 8.49</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>9</td>
<td>0 - 8.99</td>
<td>8%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>9.5</td>
<td>0 - 9.49</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>10</td>
<td>0 - 9.99</td>
<td>17%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>10.5</td>
<td>0 - 10.49</td>
<td>40%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>11</td>
<td>0 - 10.99</td>
<td>63%</td>
<td>37%</td>
<td>44%</td>
</tr>
<tr>
<td>11.5</td>
<td>0 - 11.49</td>
<td>83%</td>
<td>50%</td>
<td>59%</td>
</tr>
<tr>
<td>12</td>
<td>0 - 11.99</td>
<td>90%</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td>12.5</td>
<td>0 - 12.49</td>
<td>96%</td>
<td>67%</td>
<td>75%</td>
</tr>
</tbody>
</table>
2008 Goals and Objectives

**Commercial Fishery Goal:**
“We want a sustainable fishery”

**Scientific Subcommittee Goal:**
“We have an obligation to protect the resource and manage for all values”

**Scientific Objective:**
“Protect at least 50% of mature tidewater females and 100% of non-tidal snapping turtles”
2009 Regulations

• Commercial fishery regulations:
  – 11” min CCL
  – Tidal water harvest only
  – Harvest permit required in addition to commercial license
  – Report requirements
  – Gear restrictions & float requirement

• Personal use and pet regulations:
  – Possession limit of 1
  – Gear restrictions
Why an 11 inch size limit?
Why Tidal Harvest Only?

Consistent with commercial fishing regulations & licensing
Allows for turtle refuge in non-tidal waters
Where are snapping turtles harvested? (from 2009 harvest reports)

- Lower Western Shore 10.9%
- Upper Western Shore 4.8%
- Lower Eastern Shore 54.6%
- Upper Eastern Shore 29.7%
If you have any turtles besides snapping turtles, or snapping turtles that are not clearly 11 inches or longer measured as shown below.

**LEAVE NOW!!**

and don’t return until these conditions are met.

MEASURING A SNAPING TURTLE CURVED CARAPACE LENGTH

Measure the length of a snapping turtle along the curvature of the carapace (top shell) with a flexible tape measure that conforms to the snapping turtle’s shell from the nuchal scute (the scute directly behind the turtle’s head) to the base of the notch where the two most posterior scutes meet.

The Management
Snapping Turtle Management in Maryland

Permitting and Compliance

<table>
<thead>
<tr>
<th>Year</th>
<th>Permits Issued</th>
<th>Permit Compliance</th>
<th>Report Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>55</td>
<td>75.9%</td>
<td>83.6%</td>
</tr>
<tr>
<td>2009</td>
<td>115</td>
<td>98.1%</td>
<td>90.4%</td>
</tr>
<tr>
<td>2010</td>
<td>78</td>
<td>100%</td>
<td>92.3%</td>
</tr>
</tbody>
</table>
### Summary of the Harvest Reports

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvesters</th>
<th>Pounds Harvested</th>
<th>Top 6 Harvesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>29</td>
<td>137,040</td>
<td>87,913 (64.2%)</td>
</tr>
<tr>
<td>2009</td>
<td>52</td>
<td>106,726</td>
<td>64,817 (60.7%)</td>
</tr>
<tr>
<td>2010</td>
<td>43</td>
<td>113,245</td>
<td>65,349 (57.7%)</td>
</tr>
</tbody>
</table>
### Mean Turtle Weight by Month

<table>
<thead>
<tr>
<th></th>
<th>2008 (n)</th>
<th>2009 (n)</th>
<th>2010 (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td></td>
<td>15.0 (910)</td>
<td>14.6 (2154)</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>12.3 (3773)</td>
<td>14.9 (4240)</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>13.1 (2244)</td>
<td>13.2 (1388)</td>
</tr>
<tr>
<td>July</td>
<td>13.7 (612)</td>
<td>18.0 (579)</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>13.1 (1062)</td>
<td>18.4 (132)</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>11.7 (148)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Future Needs – Where Do We Go From Here

- Develop method(s) to define and assess overfishing (CPUE).

- Establish regional management relationship with neighboring states.

- Require continued snapping turtle management process.

- Identify funding sources for research needs.

- Include snapping turtle fishery in discussion about latent effort and limited entry fisheries.
Dedication


Acknowledgements

Harley Speir, Nancy Butowski, Gina Hunt, Tom O’Connell, Tammy O’Connell, Sarah Widman, Connie Lewis, Dianne Samuels, Glenn Therres, Rich Bohn, Pat Cain, the members of the Snapping Turtle Workgroup.