

**PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
AMERICAN EEL MANAGEMENT BOARD**

**The Westin Alexandria  
Alexandria, Virginia  
January 31, 2017**

**Approved August 2, 2017**

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## ATTENDANCE

### Board Members

Pat Keliher, ME (AA)	Andrew Shiels, PA, proxy for J. Arway (AA)
Steve Train, ME (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Rep. Jeffrey Pierce, ME, proxy for Sen. Langley (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Kathy Knowlton, DE, proxy for R. Miller (GA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Rachel Dean, MD (GA)
G. Ritchie White, NH (GA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Lynn Fegley, MD, proxy for D. Blazer (AA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Joe Cimino, VA, proxy for J. Bull (AA)
Raymond Kane, MA (GA)	David Bush, NC, proxy for D. Brady (GA)
Robert Ballou, RI, proxy for J. Coit (AA)	Michelle Duval, NC, proxy for B. Davis (AA)
Lance Stewart, CT (GA)	Pat Geer, GA, proxy for Rep. Nimmer (LA)
Colleen Giannini, CT, proxy for M. Alexander (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Jim Gilmore, NY (AA)	Sherry White, USFWS
Emerson Hasbrouck, NY (GA)	Chris Wright, NMFS
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Martin Gary, PRFC
Russ Allen, NJ, proxy for D. Chanda (AA)	

**(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)**

### Ex-Officio Members

#### Staff

Bob Beal	Kirby Rootes-Murdy
Toni Kerns	Kristen Anstead

#### Guests

Darrel Young, MEFA  
Angela Young, MEFA

Arnold Leo, E. Hampton, NY

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The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, January 31 2017, and was called to order at 4:15 o'clock p.m. by Chairman John Clark.

**CALL TO ORDER**

CHAIRMAN JOHN CLARK: This is the American Eel Board; we will be getting started right now. Will everybody on the Board please take your seats? Nobody signed up for public comment.

**APPROVAL OF AGENDA**

CHAIRMAN CLARK: Has everybody seen the agenda? Are there any changes or additions to the agenda? Seeing none; are there any objections to the agenda, and seeing none it is approved.

**APPROVAL OF PROCEEDINGS**

CHAIRMAN CLARK: Everybody has had a chance to look at the minutes from the last meeting. Are there any changes to the minutes? Seeing none; the minutes are approved.

**REVIEW OF THE 2017 STOCK ASSESSMENT  
UPDATE SCHEDULE**

CHAIRMAN CLARK: Now we'll move right on to Item 4, which is to Review the 2017 Stock Assessment Update Schedule; and I'll turn it over to Kristen.

MS. KRISTEN ANSTEAD: Today I'm going to review our timeline and expectations for our update that is due later this year. Just as a reminder, in April of last year the TC met to discuss the five-year trigger of either an update or a benchmark; and at that time recommended doing an update for 2017.

The TC got together in September to review the young-of-the-year surveys, but also to discuss what sort of timeline they could meet; as far as having the fishery independent data in and establish when we could have our terminal year.

In December the SAS was repopulated. We have a couple of new members, Matt Cieri from Maine, and Troy from VIMS.

We had gotten a call in January to go over what datasets would be needed, and to assign tasks and develop a more solid timeline. This is where we are with our update. We've already sent out data requests to the states based on the TC feedback. They thought they could meet a 2016 terminal year, and so that's for the fishery independent data.

We expect that data to be in by March 1st, with the associated biological data to support the modeling. Some states felt that they could have preliminary landings by April or May. We want to make the terminal year for those 2016 as well; but we are fine with not finalizing those until the end of the year, because the landings are not included in the modeling approaches that we'll be updating.

We'll kind of stick that in at the end, so that's fine to not have those finalized until the end of the year. We'll spend the summer doing our analysis, and hope to present it at annual meeting in October; the full update. The update we will be adding more years to the modeling, and I just want to remind you we can't change the modeling structure or that would be a benchmark. That means for this update we will be updating the trend analysis from the last stock assessment, which is the Mann-Kendall, the Manly, the ARIMA, and the Power Analysis; as well as updating the growth analysis, and that is on a regional and coastwide level. We will not be updating the SB-SRA, because additional work is needed. That additional work would require a peer review; so that would have to wait for a benchmark.

We also will not be updating the traffic light approach, because that also needs more improvements that would require a peer review. What you will get out of this update is the updated landings; both on a regional coastwide trends in abundance for the trend analyses. For

these coastwide and regional abundances you'll have are they declining, staying the same, increasing. This will be for both young-of-the-year and the yellow eel surveys.

What you will not get out of this is an overfishing or overfished status. AREMA is the only one out of those trend analyses that produces reference points, but the Review Panel did not recommend them for use for management. We will not be getting any reference points out of this, it will just be is the stock depleted, what are the regional trends?

We are also updating the growth analysis, so the length, weight, age-at-length relationships by region and sex and how they differ, and an updated life history section; which we'll pull from the literature and any new research. I will just remind you why we're doing an update instead of a benchmark, and that is because in the last assessment the Review Panel and the SAS and the TC developed a list of required research recommendations that needed to be improved before the next benchmark is considered.

This is the list of sort of the critically needed research in order to start thinking about a benchmark; and when the TC reviewed this list and went back to the states to say has this work been initiated or completed? Not enough work had been done to start a benchmark; so that is why we're doing an update. I'll take any questions you have.

CHAIRMAN CLARK: Any questions for Kristen? Seeing none; I had one, Kristen. I was just wondering the whole idea of the depleted status of eels came from the DB-SRA. From the trend analysis we will not be getting that determination, we'll just know whether the stock has been increasing, decreasing or staying about the same?

MS. ANSTEAD: Correct. We certainly will not be getting an overfished/overfishing, but we will see has any movement happened in the trends regionally and coastwide.

CHAIRMAN CLARK: Okay I was just curious, because that was sort of the basis for going to the last addendum and putting in the coastal cap was based on that depleted status. Interesting that won't go ahead.

#### **TECHNICAL COMMITTEE REPORT**

CHAIRMAN CLARK: Seeing no further questions; I will now turn it over to Kirby for the Technical Committee report.

MR. KIRBY ROOTES-MURDY: This will be a pretty short presentation, we were working under the understanding that we were going to have less time, and so we truncated that. In addition, I'm giving this presentation rather than Tim Wildman, our TC Chair, as we were concerned that it wouldn't make sense for him to come down for a ten minute presentation.

Getting into it, I'm going to walk through just some of the items that the Technical Committee discussed when they met back in September of last year; the young-of-year surveys, the updates on nematode research, the Maine-life-cycle study and otolith exchange, and landings versus harvester reports. These were some of the discussion areas the TC had. I've crossed through points that Kirsten has touched on that were pertinent to the stock assessment update and schedule.

#### **REVIEW YOUNG OF YEAR SURVEYS AND MAINE LIFE CYCLE SURVEY**

MR. ROOTES-MURDY: The Technical Committee when they met back in September walked through all of the state young-of-year surveys from Maine down to Florida; everything from the methods, the results, and some of the challenges.

For example, Georgia recently moved from having a young-of-year survey to a yellow eel, in part because of an inability to encounter a lot of young-of-year. What a lot of people have noted in these discussions was that many of the survey location sites were selected opportunistically,

due to logistics of trying to set up the gear; and also to encounter young-of-year.

With that you don't always get great long term data from that approach. What the Technical Committee has recommended that moving forward if a state looks to try to either move their young-of-year survey to a different location or not conduct the young-of-year survey, because they're not encountering it; that they should replace it with another survey for a life stage, such as yellow or silver.

One of the challenges that did get some discussion by the group was that not all of the young-of-year surveys that the plan requires the states to implement provide equal or important information to the stock assessment process. It is something that they're trying to determine at the Technical Committee level; what the best approach is to really lay out which ones are very helpful in tracking a trend over time, and which ones aren't and then how best to recommend changing those.

One way that they're looking at doing this is that a couple of the members, Brad Chase and Laura Lee are conducting a power analysis. They initially pursued this research about a year or so ago and then stopped. They're looking to pick it back up, but basically try to use this power analysis to indicate which young-of-year surveys are tracking a trend, with regards to the population, which aren't.

Then from there start to hone in on those ones that aren't and how best to improve them or recommend a different survey approach. Other areas that the Technical Committee touched on was nematode research, we had a VIMS grad student Zoemma, who presented her results to the TC; largely trying to pull from information the states all provided regarding presence/absence for detecting nematodes in their coastal waters.

The TC was very interested in her results, and are hoping to have that presented again to the Technical Committee later this year, with the possible recommendation of having the Board

receive a presentation from her; because it is very pertinent to management. Regarding the Maine-life-cycle study, we got an update from the Maine TC member who highlighted that due to staffing, gear, construction, at some of the survey sites, it created a lot of challenges in the first year of this survey to try to get great data.

There is a lot more hope on Year 2, because of dedicated staff member has been hired to complete this work, and improvements are expected in the second year. Then with regard to the otolith exchange, there has been a process set up by actually Kristen, to start that exchange among the states of I believe Maine all the way down to Florida. They are looking to discuss the results later this spring, possibly publish a report ahead of the stock assessment update; and there is the potential of an in-person workshop to go over that. Last, in talking about landings versus harvester reports. This was a topic that was brought up regarding how best to inform management coming out of the next stock assessment update. Because these terms have been used interchangeably, over the past few years there has been problems when you set quotas based on data that is a mix of these two; when in fact they're truly two different types of data.

There are efforts underway right now to try to get both landings and harvester report information updated through the terminal year for this 2017 stock assessment update. But in the interim time before that's completed, the stock assessment update is that states should be using harvester reports, and that they should be largely evaluating them against landings.

Whichever of the two is the highest has been the standard approach in the past, but they also need to evaluate where there are discrepancies, to try to make improvements there, and that hopefully coming out of the stock assessment update there could be a more improved approach for reconciling those differences, and providing management with advice on which is more accurate moving forward. With that I'll take any questions.

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CHAIRMAN CLARK: Kirby, would you also before you get to the questions, just address the implications of the TC talking about states discontinuing young-of-the-year surveys or transferring them due to the requirements of the plan?

MR. ROOTES-MURDY: Sure, so right now no states are allowed to just drop the survey requirement. What they can do is have these exceptions such as what Georgia went for, which is if you are no longer able to conduct a young-of-year survey based on challenges that have been laid out, to move to another survey type; so looking at a different life stage is primarily the way the Technical Committee is recommending those states work around that challenge in the future, if it arises for other states.

CHAIRMAN CLARK: That does have to be approved by the Board though, correct?

MR. ROOTES-MURDY: That's correct.

CHAIRMAN CLARK: Are there any questions for Kirby? Dan.

MR. DAN MCKIERNAN: Kirby, could you elaborate on the nematode research and how that is deemed useful?

MR. ROOTES-MURDY: I can try. We have this grad student from VIMS, Zoemma, who has done work at basically trying to determine how nematodes are affecting early development of eels; and if it's deterring their growth. There are some other components to her study, not just looking at presence/absence. Maybe Kristen, if you remember, could speak to it a little bit more.

MS. ANSTEAD: Yes, I think she's trying to come up with a system where states can come up with a one-page laminated thing where states have a very easy protocol for determining whether or not there is nematode presence in their eels; and at what stage of development it is. Is it at the last stage of the eel being sick with this nematode or are they just infected? When we

get to the next benchmark that could help us kind of talk about productivity in each of the regions, if we have regional data where the nematode is more present than others, we know that this affects the eels. Like Kirby said their growth or their ability to reproduce or their movement. It will factor in.

CHAIRMAN CLARK: Bob Ballou.

MR. BOB BALLOU: Thank you, Mr. Chair. I'm struck by the fact that now five years after the last benchmark, we're still lagging in terms of providing the research necessary to fill the gap and allow for the next benchmark to take place. How are things progressing in that regard? Is there a sense that that gap is likely to close in relatively short order? I guess the related question is, when is the next benchmark planned; and how likely is it that the research will be provided in time to make that happen?

MS. ANSTEAD: One thing the TC did do last year in the spring, was look at every research recommendation that was made in the last assessment and have states go in and say whether this work has started. Some of it has been. But when we thought about doing the benchmark, we thought if we put it off just a little bit longer it would give us better – because there was so much trouble with the modeling in the last one.

Why not wait and get the data we really want, so we hope soon? That was part of the motivation of doing the update, was keep it in people's minds, reevaluate the trends. It is still valuable work and it will restate what we need to try to make that sooner. Three to five years, hopefully, but I can't say.

## **OTHER BUSINESS**

### **UPDATE ON AMERICAN EEL FARM PROJECT IN NORTH CAROLINA**

CHAIRMAN CLARK: Any further questions? Seeing none; moving on to our next agenda item. Under other business, Dr. Duval has an update on the American Eel Farm project in North



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Carolina, where they're looking at raising glass eels.

DR. MICHELLE DUVAL: Yes, for the opportunity to provide the Board with some input. I just wanted to let folks know that the American Eel Farm attempted to deploy some nets on the White Oak River, on the 18th of the month, but had some boat problems; so that was unsuccessful.

But they did manage to get a net deployed in that river system on the 23rd of last week, and apparently they have harvested 52 glass eels; that is individuals, not pounds.

I also just wanted to let folks know that Marine Patrol did conduct an inspection of the facility; it took about an hour and a half.

The owner was very cooperative, didn't find anything out of alignment. Tanks were ready to hold eels, so everything went according to expectations and I'll just also note that our Legislature is in session again. We're undergoing a transition in terms of administration so things are going to be somewhat unsettled, I think for a little bit.

But we are finalizing our legislative requests for this upcoming year, and one of those as we discussed at the last Board meeting is to amend the statutory language that inadvertently roped our marine patrol officers into not having the ability to inspect folks without a reasonable suspicion. Now that doesn't necessarily apply to the Eel Farm, because they are permitted, there are very stringent permits requirements as we discussed at the last Board meeting; but I did just want to let folks know that.

**ADJOURNMENT**

CHAIRMAN CLARK: Any questions? Seeing none; and with no other business coming before the Board, we are adjourned.

(Whereupon, the meeting was adjourned at 4:34 o'clock p.m., January 31, 2017.)