

# **Professional Development Committee Annapolis Site Visit Report**

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Committee Co-Chairs: Taylor Armstrong and Olivia Phillips

Participants: Mandy Bromilow, Taylor Armstrong, Megan Wood, Melissa Karp, Dan Crear, Bethany Williams, Olivia Phillips, Savannah Michaelson, Quang Huynh, Zoemma Warshafsky, Gail Schwieterman, Jingwei Song

*On Friday, January 15<sup>th</sup> 2015, 12 VIMS students participated in the Graduate Student Association Professional Development Committee (PDC) site visit to Annapolis, MD. The itinerary consisted of three meetings with individuals within federal and state government agencies. The following report consists of general information about each agency, career advice, and lessons learned by trip participants that we would like to share with the entire VIMS graduate student community.*

## **A. Meeting Minutes**

### **U.S. Fish & Wildlife Service – Chesapeake Bay Field Office**

#### **Meeting Participants:**

Genevieve LaRouche, Ph.D., Field Supervisor

- Proactive conservation/restoration
- Land protection

Chris Guy, M.S., Environmental Contaminants Biologist

- Branch Chief of Conservation Planning and Assistance
- Impacts and regulations of construction on natural resources
- Coastal barrier conservation (stop development through his department)

Josh Newhart, M.S., Fisheries Biologist

- Manages fish and crab tagging databases

Julie Devers, M.S., Fisheries Biologist

- Impacts of fish passages and dam removals on fisheries species
- Fish Habitat Partnership Program (restoration)

Peter McGowan, M.S., Environmental Contaminants Biologist

- Environmental contaminants (oil spills and HABs)
- Poplar Island Restoration Project

Julie Slacum, Ph.D., Division Chief of Strategic Resource Conservation

- Oversees endangered species and recovery species
- Conducts consultations and project evaluations for adverse effects, often with the Army Core of Engineers
- Wind power project evaluation
- Occasionally has to deal with lawsuits

- Her position allows her to:
  - Gain more of a policy perspective, but still gets to do field work
  - Test her critical thinking and negotiation skills

Steve Minkkinen, M.S., Fisheries Biologist

- Project leader for Maryland Fishery Resources Office
- ASFMC informative
- Fish restoration projects and management
- Technical assistance
- Manages 3 tagging programs
- Collects American shad eggs for restoration
- Characterizes fish populations
- Looks at the relationship between eels and freshwater mussels

Leah Davis and Paige Hobaugh, Undergraduate Interns

- Chesapeake Conservation Corps (CCC) volunteers
- 1-year undergraduate internship with government (similar to AmeriCorps)

#### **About U.S. Fish & Wildlife Service:**

- Small Agency (~8,000 people)
- Very dedicated and passionate people
- Work on legislative and conservation projects
- Divided into Ecological Services and Fisheries Services
  - Ecology division: Work with variety of organisms, not just marine/freshwater
- Executive Branch
  - Implements laws
  - A lot of discretion on how to make mandates work
  - e.g. Paris climate change talks
- Regulatory Program (enforcement)
- Coastal Conservation/Restoration Program
- Many partnerships for projects (state, federal, and non-profit)
- NOAA is mandated by USFWS within the Department of Commerce
- Mission: USFWS is protecting resources “on the ground”

#### **Interview Qualities:**

- Diversity – tend to hire M.S. graduates (more flexible)
- Analytical skills are important
- Personality – Be a team player with a positive attitude
- Writing Skills
- Public Speaking Skills
- Work ethic is very important
- Resumes and transcripts are important
- Research and background experience is often important, but not always
- In interview, need to have support for application answers on USAJobs
- Work history/internships

- Be willing to step out of your comfort zone

### **Lessons Learned:**

- USFWS has flexibility – the government receives mandates, but they have freedom in deciding how to get from point A to point B
- In the private sector (consulting), money is the bottom line
  - Everything is driven by profit
  - Need to have monetary value for projects
  - Have to figure out what's important and how to fund it
- Government looks at where the money will have the most impact and then pursues funding
- Government agencies have slightly lower pay than private agencies, but better benefits; state agencies pay less than federal agencies
- State and federal agencies constantly need to apply for competitive grants
  - Funding is usually soft money
  - Get very little funding for projects so spend a lot of time writing proposals
- The highest levels of non-profit organizations can have good benefits and pay well
  - Have to put in long hours, but they're typically pretty flexible
  - Job is to advocate policy
  - Should have an outgoing personality because have to work with people at various organizations
- Ph.D. vs M.S.
  - Ph.D.'s have more mobility to move up
  - Ph.D.'s tend to be specialized, which is why M.S. is more common in this division (M.S. tend to be more flexible)
  - Ph.D.'s often have analytical jobs
  - NOAA and USGS hire more Ph.D.'s because their goal is to publish
  - M.S. have more generalist positions
- Using USAJobs:
  - Don't be afraid to say "most qualified"
  - Short application periods mean they already have someone in mind
  - Use the USAJobs resume builder rather than submitting your own format – easier for people to find what they are looking for on your resume
- Understanding the framework of policy and agencies is important no matter what job you end up taking
  - How are priorities set?
  - Makes you a stronger proposal writer for grants

### **Advice:**

- Networking is key
- Be flexible and challenge yourself
- Take on any opportunities that are available, even if they aren't exactly what you were expecting to do – this gets your foot in the door
- Develop great relationships because references are VERY important
  - Go to the office and talk to people in person if you're applying for a job
- Develop good writing and speaking skills
  - Read a lot, even if it's just the newspaper or fictional novels

- Volunteering shows passion and can provide an opportunity to network and gain experience in the field
    - Not everyone asks for volunteers but you can ask to go out with them
  - Don't just look for advertisements for jobs/fellowships/grants/etc., be proactive and call someone to ask about it
  - Don't think any job is beneath you and don't be afraid to take temporary positions
  - Learn as much as you can about a job or an organization, especially if you are going in for an interview
  - Join a professional organization and get involved with the local chapter
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## **Maryland Department of Natural Resources**

### **Meeting Participants:**

Lynn Fegley, M.S., Deputy Director of Fisheries Services

- Conflict resolution among stakeholders and all user groups to implement rules
- ASFMC committee member
- Maryland blue crab stock assessment

Mike Luisi, M.S., Assistant Director of Marine and Estuarine Fisheries

- Fisheries management and policy
- Make rules that protect fisheries resources, provide for public, and accommodate constituents
  - Keep in touch with stakeholders
  - Conduit between fisheries and state
  - Different part of agency enforces the rules
- ASMFC and MAFC member

### **About Maryland DNR:**

- Generally interested in monitoring and directed efforts for assessments
  - Less hard science
  - Opportunity to publish papers and present papers at AFS and Maryland DNR
- Collaborate with agencies in other states to determine what to monitor
- Create rules and regulations based on stock assessments
  - Work with scientific uncertainties and use best intuition/guesses and precautionary measure; factor uncertainty in when setting quotas
- Bring in people from VIMS and other agencies/academics for specific projects
- Important species for Chesapeake Bay: striped bass, blue crabs, and oysters
- State agencies have the ability to make changes and implement effective management
  - Need to understand community objectives and stakeholder interests
- Have field biologists on staff who carry out the monitoring programs for the ASMFC (Atlantic States Marine Fisheries Commission) assessments
  - DNR staff sit on the ASFMC scientific committee to determine the mandates for monitoring
  - ASFMC is interested in habitat and economics in addition to stock assessment

## **Interview Qualities:**

- Communication skills
- The application is more important than the resume
- Diverse skill set – be able to show this on resume
- Biggest take away from grad school: Be an independent problem solver
- What drives your passion?
  - Technical? Influence policy for public?
  - Figure this out when looking for jobs

## **Lessons Learned:**

- Must understand the community objectives for a resources for successful management
- Person/party in government strongly influences the projects and policy decisions that come out of this division
  - Funding is determined by government administration
- USAJobs:
  - Model your application to the job description using key words to get through computer/human resources process (they see it first)
  - Consider looking at the rest of the agency – name may get passed along to the position you actually want
- Ph.D. vs M.S.
  - Ph.D.'s may be overqualified for most positions (most are field ops)
  - 3 Ph.D.'s currently on staff at Maryland DNR
  - Many different kinds of positions for B.S., M.S., Ph.D. (mostly M.S.)
  - Ph.D.'s may get frustrated with all the policy, feeling like science isn't respected
  - M.S. graduates usually hired as field biologists
- Upcoming positions
  - Fish health is a growing issue
    - Mycobacteria
    - Hatcheries
    - Oyster disease scientists
  - Stream monitoring/water quality

## **Advice:**

- To work in policy, rules, regulations, you need thick skin (can't take anything personal)
- Monitor websites for opportunities
- For careers, take a starting job with no benefits
  - Contractor position (short-term)
  - 10-week seasonal positions
  - Limited opportunities up and down the coast
  - BE FLEXIBLE
- TAKE INITIATIVE

- NETWORKING
    - Reach out to people that may give you more information about job opportunities
      - ASMFC is a good place to start
        - Opportunity to meet everyone in the field working along the coast
        - Interact with NGOs, state, and federal agencies
  - Figure out what drives your passion when looking for jobs
  - Look for jobs that may be outside your specific interest, but within the agency you're interested in
  - Learn to work independently without much direction
  - Get comfortable with presenting information confidently
    - Practice at conferences
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## **NOAA Chesapeake Bay Office**

### **Meeting Participants:**

Bruce Vogt, M.S., Coastal Living Resource Manager

- VIMS alum
- Knauss Fellow: Naval Oceanography Policy, Planning/Analysis Division
- Chesapeake Bay Program's Fisheries Goal Implementation Team (GIT)
  - Focuses on the goals and outcomes of the Bay fisheries
  - Brings people together from various agencies
- Sea Floor Mapping Survey
- Fish utilization of restored oyster reefs

### **About NOAA Chesapeake Bay Office:**

- 25 people in office (federal employees and contractors)
- NCBO partners with other agencies to work on projects, particularly Chesapeake Bay Program
- Headquarters duties:
  - Almost all fisheries
  - Funding
  - Support Bay efforts
- Regional duties:
  - Endangered species
  - Management
- NCBO is part of NMFS (National Marine Fisheries Service), not a regional office
  - Coordinate NOAA's efforts in Chesapeake Bay
  - Don't manage or have regulatory power
  - Fund science for state management
- NCBO has a funded science program focused on oyster ecosystem services

- A rewarding aspect of working for NCBO is that you can see the progress in the projects that you work on
- People management and administration are important aspects of the job
- NCBO does some research
  - Have a research vessel and side scanner to map bottom type for oyster restoration throughout the Bay
  - Sturgeon monitoring program
  - Using fish pots to determine fish utilization of reefs
  - Collaborate with SERC (Smithsonian Environmental Research Center) for shoreline research
- Great exposure to a broad variety of projects and understanding policy framework
  - Try to understand how big funding agencies are changing; what are their new aims?

### **Lessons Learned:**

- A key to working for NCBO is being able to synthesize science without misrepresentation, and collaborating to reach a solution
- NOAA often hires contractors to do research
- NOAA has a lot of different things going on, but all jobs require the ability to work well with others
- Ph.D. vs M.S.
  - NOAA hires people with at least a M.S., preferably more

### **Advice:**

- The Knauss Fellowship is a good experience/opportunity for anyone going into science that is interested in working at an agency, not just policy
  - Learn how Congress works
  - Some positions are more research-based or more quantitative than others (executive branch)
  - Could help determine funding for projects
  - Legislative branch deals more with politics
- Take advantage of fellowships or internships to gain experience and figure out what you want to do or what you like if you're not sure yet
- Talk to people at different agencies to get a feel for what they actually do on a day-to-day basis
- Important to get broader exposure
- Important experiences
  - Exposure/experience with different things
  - Understanding the policy framework
  - Know how priorities are set (good for writing grant proposals)

## **B. Student Feedback on Expected Outcomes**

- 1. The meetings on the itinerary allowed students to interact with professionals from a variety of sectors and disciplines within the Annapolis professional community.**

Most of the students agreed that the site visit was a great opportunity to meet people from multiple agencies. Although most students enjoyed meeting with multiple agencies, there was not a lot of variety between meetings; we only went to state and federal agencies, and almost everyone we met with works in fisheries management. The ideal site visit would include meetings with a more diverse crowd of people from all sectors (federal, state, and private) that work in various fields of marine science, i.e. ecology, water quality, aquatic health, fisheries, policy. It would also be useful to meet with people who are doing the hard science and research, since some students may be interested learning about other career options outside of academia, policy, and management.

- 2. The hosts provided satisfactory information and advice specific to their positions and tailored to the interests of the VIMS students in attendance.**

Most of the information shared at each meeting was VERY useful for all students involved. Students had the opportunity to ask specific questions and each meeting participant responded to student questions with examples from their own experiences, both past and present. At two of our meetings, we had the opportunity to speak with multiple people from the agency, which allowed us to get different perspectives, from field biologists to managers, M.S. to Ph.D.; several students found these meetings to be more useful than meeting with just one person. Each agency also provided students specific information about how their inner workings, and offered tailored advice for getting a job with that agency, which students will be able to take into consideration when looking for a job.

- 3. The itinerary, timing, and number of participants allowed the student group to arrive at the meetings on time and represent VIMS well.**

The timing of this particular trip worked out well; we had enough time between meetings to travel to our next destination (and eat lunch), and we planned well for travel stops along the way. Some students felt that three meetings was the perfect amount for a day trip such as this, but others thought that it was too much. By the end of the day, many students were worn out from racing to meetings and talking to people all day, which made it difficult to stay focused at our last meeting. Students have suggested either reducing the number or time allotment of meetings, or organizing future site visits over multiple days, depending on how far we have to travel. Twelve students participated in the site visit, which was manageable, but a few students thought it would be better to have a smaller group to ensure that everyone has the opportunity to ask their questions. A maximum of 10 students may be ideal.

- 4. Students gained insight into a variety of career options and received advice to achieve similar goals, and were able to effectively share these ideas with other members of the graduate student community at VIMS.**

All students involved agreed that they learned a lot about different career options and approaches for reaching their goals and getting a good job. It was useful for students to hear



about participants' past experiences and advice for building a competitive application for future jobs. Many of the participants were willing to reach out to students and provide further information after the meetings, which the students greatly appreciated. At our meeting with USFWS, Genevieve LaRouche gave each student her business card to contact her with any further questions about USFWS or general advice for careers in science. For future site visits, it would be ideal if all participants in these meetings could provide each student with their business card so that students can reach out to them when looking for a job or seeking advice. This would not only improve the students' experience but also encourage them to network and build relationships that may prove beneficial in the future.

### **C. Next Steps**

1. Promote the following:
  - National Conservation Training Center
  - USFWS funds a Director of Resources Fellowship
    - 11-week project that gives you a competitive status for 2 years if you decide to continue working for USFWS (aka priority when applying)
  - The Oyster Recovery Partnership (non-profit) is always looking for help
    - Interested students should contact Genevieve LaRouche (genevieve\_larouche@fws.gov)
  
2. Synthesis of student feedback and organization of future PDC site visits  
Potential themes: military, consulting, private industry, NGOs, education, research scientists