

Talking With: Mike Sissenwine  
The Ffiles  
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After nearly 30 years with NMFS, stints as an NEFSC division chief and Center Director, as well as senior science leadership positions in the Agency's headquarters, Dr. Michael P. Sissenwine is calling it quits. He officially retires next month. The Ffiles caught up with him in Fukuoka, Japan, where he was attending a meeting of the International Commission for the Conservation of Atlantic Tunas (ICCAT). Before you ask, Japan is a major tuna fishing nation in the Atlantic.

The Ffiles: As a senior and, dare we say, storied fishery scientist, one who's been involved in any number of important developments for this agency's science programs, what's your gut feeling about the "next big thing" in the field, and in the field of ocean science?

MPS: It strikes me that during my career a very major thing has been the advancement of our mathematical modeling to assimilate complex data sets, so that you can conduct stock assessments with really varied types of data. But we haven't caught up with the physical sciences in the ability to make measurements. Next decades will be really unimaginable in terms of our ability to measure things through new technologies of two types. One is the transformation of military technologies (lasers and acoustics for example) to survey methods. But the other, which is less talked about, is the various chemical measurements that can be made to identify fish species and so on — for example, identifying gut contents and origins of stocks through elemental analysis of otoliths and those sorts of things. Those are all possible now, but routine application in some sort of integrated system is really what needs to be developed.

The Ffiles: What's the best thing you ever did as a federal employee?

MPS: Hired a lot of other really good federal employees. Seriously. When I finished by Ph.D., I thought the nicest compliment anyone paid me, and still may be the nicest, was from my major professor, Dr. Saul Salla of the University of Rhode Island. At some party celebrating my completion of the Ph.D. he commented that his goal was to provide students that he thought would achieve more than he had, or ever would, and complimented me by thinking that I was an example. In my career I have had some interaction with students and some opportunity to mentor, but my greatest influence in this regard has been in hiring decisions and then supporting those hires in terms of development and opportunities to achieve.

I always felt that the role of a center director in the agency is one of the best jobs in science because you are able to achieve so much through other people, but are still close enough to things to feel some positive influence based on your own scientific abilities. Positions that are lower are limited to what you can do yourself or in a small group, and those that are higher are out of touch with the day-to-day doing of science. The Center director job is the ideal place to me, in that there is the opportunity to have long-lasting influence based on who you hire, and how you enable them to be successful. My observation is that the way that leadership is exercised, and the relationship between leaders and staff, is quite unique in the agency's science centers in comparison to other large organizations in government.

Regrettably too much at the higher level is about making the boss look good. That's fairly obvious to anyone who watches politics work. Everything that comes out in press releases in the highest levels is attributed to the boss, even if he or she inherited the success. Even in the regional situation, people are under so much pressure owing to the controversy of the situations we deal with, it's not about either staff or making the boss look good, it's about survival of the organization — which, by the way, is a real credit to all those people who are working under those conditions. In the Centers it's about enabling the staff to be successful. There are some science directors who gain a lot of notoriety themselves, and I am probably one, but more importantly it is about enabling others to be successful. That's the mark of the successful center, not what the director accomplishes, but what the people in the Center accomplish.

The Ffiles: What parting advice would you give to a young marine scientist at NOAA's Fisheries Service today?

MPS: There is clearly the need to do the hard work first, to demonstrate your abilities as a scientist before trying to work one's way up the ladder through managerial-type positions. The demonstration that you are actually a creditable scientist is part of what is necessary to lead by what I call "authenticity." Then, when you get a chance to assume some leadership, people really do understand why you are there, and what you are about. First, invest in your scientific career for a significant period of time before getting worried about what your position is in an organization. Second, consider carefully why you want to be involved in applied sciences, particularly those as controversial as fisheries. Obviously, some people don't want to be in those situations. They ought to recognize that, and seek an appropriate alternative. Once you have gotten involved, try to keep a perspective on why you are there. Don't get discouraged because you are under the spotlight and there's a lot of controversy. Even though it is hard, and sometimes uncomfortable, it's a lot better than doing something no one cares about.

The Ffiles: And any advice for those of us a bit longer in the tooth?

MPS: Keep doing it as long as you enjoy it, and stop while you can still feel positive about it, and before it becomes a drag that will detract from all the positives.

The Ffiles: You are perhaps the best traveled person in NOAA Fisheries history — and I'm sure you've been asked many, many times how far, how many miles, or places you have been. How do you usually answer that question?

MPS: First it's probably not true that I am the best traveled — Ken Sherman is probably better traveled. But I am sure that I have traveled several million miles over my career.

The Ffiles: And how important is it for scientists and managers to travel widely?

MPS: I think it is important to have a global perspective. I don't think it is necessary to physically travel as broadly as I have in order to get it. I have found traveling useful and sometimes exciting, but you pay a fair price for it. Part of it is the time that I spend in Europe or Asia trying to keep up with stuff I am responsible for on the East Coast. That means I work well into the evening, sometimes for a good deal of the night. It's 11PM now, and it's typical that I would be working at that hour when in Asia. A lot of what I have gained by traveling can now be acquired over the internet. That said, there is also a value to networking —meeting and getting to know people, and they you, developing trust — and some degree of travel is necessary to make that work.

The Ffiles: Is there a country or place you've not visited that you intend to see?

MPS: I am sure I will do a significant amount of traveling in the future for various things. I would like to spend more time in Africa. I have been in North Africa, Namibia and South Africa, but would like to see more of the sub-Sahara, places around the Gulf of Guinea where my colleagues are working, and the East Coast of Africa. Those would be fascinating places to learn about, and there is clearly a need for scientists to invest and help with some of the issues there. I don't have any particular plans, but would welcome opportunities there.

The Ffiles: Prospects for groundfish stocks in the Northeastern US are improving, but let's face it, they've taken a beating. Looking back, was there any way to avoid the hole we got into, or was the time just not ripe for controls that might have at least slowed the declines?

MPS: I have no doubt that decisions could have been made along the way that would have made the situation better, or not as bad. There have been some critical points where the wrong decisions were made. There is always going to be some of that, because people, and the system, are not perfect. I could certainly find places where something different could, and should, have been done. Remember, in 1977 when the Magnuson Act went into effect, the signs were positive for northeast groundfish — things were

improving. It wasn't that people weren't ready for management, but there were mistakes and a combination of circumstances that allowed that lack of general appreciation for a need to manage to derail management. It wasn't that the scientists and the lawyers and the managers were all doing everything the proper way, but the industry turned them back. It was more that some unfortunate occurrences within the realm of the non-industry people, particularly in the mid-1980s, opened the door for that natural "we aren't quite ready yet" attitude to prevail. Once that happened, it became hard to reverse it. For example, 15 or so years ago, when it was clear that something had to be done, the agency was ready to act on an emergency plan, the door was open for management to push back. But various political considerations stopped it from happening. I think it could have been achieved then, but it wasn't. It was really a toss of the coin as to whether it went that way or it didn't. I think it would have turned a lot differently had we taken a different approach at that time.

The Ffiles: These are not the brightest of times for environmental advocacy. One recent highly-publicized essay "The Death of Environmentalism" makes an argument that we are in a "post-environmental" world. The authors say both thinking and tactics among advocates need to be upended for a new, effective environmental policy to emerge—one that can take on the now-global problems of human-caused damage and degradation in the natural world. While the authors may not be right, they do raise very relevant questions that can be applied to how a natural resource management agency like ours can be effective, when so much of our enabling legislation is rooted in the thinking and "green" ethic of the 1970s. From where you are, do you think the Agency can still promote environmental stewardship, and if so, are we agile enough to be effective in 2005, given the changed political and social landscape of the country?

MPS: That's a complex question. The issue of whether environmentalism is dead or not, in the context of the article you refer to, is raised by some advocates who think they are not achieving as much as they would like to. The agency shouldn't have its own environmental agenda. The agency has to ask: are we achieving what the majority of the public want as expressed in the law? We are agile enough to do that, and we are providing advice to the lawmakers in terms of whether their laws make sense, are well formulated, and can be implemented. The agency lawyers comment on whether the legislation is legally well-specified so it can stand up in court. Should not let ourselves be judged by the objectives of a particular segment of the society. If those segments can achieve what they want through the law, then the agency is responsive.

The Ffiles: It sounds like you disagree then, that there is a conflict between the present social and political landscape and the basic conservation ethic that underlies most of our major enabling legislation. You don't see a conflict there?

MPS: We certainly face challenges — in particular, how to implement the laws when they conflict with one another, or with the current reality. For example, the Marine Mammal Protection Act was designed fundamentally to stop people from hunting marine mammals. It wasn't intended to deal with the conflict that occurs when marine mammals are competing with people for beach space in California. It also takes time for legislation and statutes to catch up with new realities.

The Ffiles: In recent years you have been doing some international work with developing countries and sustainable fishing — what's the news from that front?

MPS: The problems have probably gotten worse since the last time we talked about this. It's a reflection of the overall disparity in wealth, and some of the results of globalization in places where there aren't good systems for distributing the benefits of globalization. In those cases, in the short-term, it's led to more overfishing and habitat destruction for small-scale coastal fisheries on which tens of millions of people depend. The developed nations are advancing well, toward stakeholder participation, implementing measures to rationalize fishing effort, and dealing with habitat impacts. But many of these approaches aren't viable in small-scale fisheries in developing countries. The amount of money being spent on science and capacity building has probably decreased there, and the basic state of these coastal fisheries is pretty dire. We also have natural events: for example, the recent tsunami that has made the lives of people in that area much worse. Some may say such a disaster might help deal with

overcapacity that was prevalent before the tsunami, because so many boats were destroyed. But it appears that won't be the case. There is a lot of investment going on right now that might overshoot the mark, and also, because the local fleets have been absent from fishing grounds, pirate fishing has followed.

The Ffiles: What's next for you?

MPS: For a few months, what I would call "decompressing." I will continue as president of ICES, that's a nice way to maintain my perspective and global context. I don't have any specific plans but intend to remain active in scientific pursuits. I am certainly not interested in starting a second, brand-new ambitious career. If I wanted to work that hard, I would stay where I am!

The Ffiles: Anything else you'd like to add?

MPS: Best of luck to everybody. As I say, being in the Northeast Center, and being Center Director are the best things I have ever done. I don't necessarily imply I did them well, but these were the best from my perspective.

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