

Spotlight on the
**WORLD
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FUND**



Bill Eichbaum, Vice President of Arctic and Marine Policy, Talks About the Challenges Facing the Arctic & Other Ecologically Significant Places

In the spotlight for this issue of *Currents* is Bill Eichbaum, Vice President of Arctic and Marine Policy for the World Wildlife Fund (WWF).

On 19 October 2010, Ken Hess from the public affairs staff at the Chief of Naval Operations Energy and Environmental Readiness Division (N45) and Bruce McCaffrey, managing editor of *Currents* magazine, conducted this interview as one in a series of interviews with representatives from environmental non-governmental organizations (NGO). Mr. Eichbaum spoke about WWF's top priorities, past interactions with the Navy and Department of Defense (DoD), and opportunities for future collaborations between WWF and the Navy.





We seek to be the voice for those who have no voice.

CURRENTS: How long have you worked for WWF and what are your present responsibilities?

Bill Eichbaum: I've been here twenty years. When I came here, I really came for only one purpose, which was to help WWF create a marine conservation program. After I'd been here three weeks, I became the Vice President for Environmental Quality, when that person left. I ended up assuming an international policy agenda at WWF. In the twenty years since then, I have run each component of our conservation program, with the exception of our species program. I helped to start our energy program back in the early 1990s. We also created a marine conservation program. I was instrumental in getting

a major presence established in Russia in the 1990s and was part of our efforts to focus our work in the late 1990s and early 2000s on a smaller number of ecologically significant places around the world.

I am the Vice President for Arctic and Marine Policy, which means I have specific responsibility for our policy agenda in the Arctic, and broader obligations across marine environments. On an acting basis, I am also the Vice President for Government Relations.

Before joining WWF, I spent 20 years as a government regulator at the States of Maryland, Pennsylvania, and Massachusetts and at federal levels in the environmental conservation area.



WWF ONLINE

WWF'S WEB SITE (www.worldwildlife.org) serves as both an informative tool for activists and an educational resource for students—painting a vast overview of the planet and all its inhabitants and species.

WWF's essential message is a warning about climate change and threats to our natural habitats. Web surfers can learn about nineteen priority destinations identified by WWF where climate and resources are at risk. From the tropical rain forests of the Amazon to the remarkable wildlife of the Yangtze region, WWF studies the diverse aspects of nature and what steps are necessary to preserve some of the Earth's most glorious—and most threatened—environmental gems.

The 2010 Living Planet Report, available on the WWF web site, is a comprehensive global study of biodiversity, ecosystems, and consumption of natural resources. Did you know that we currently consume the equivalent of 1.5 planets to support human activities? According to Living Planet, current trends project that by 2030 we will need the capacity of two planets to meet natural resource consumption needs.

The WWF's Conservation Action Network offers insight and opportunity to help support efforts to protect endangered



species. Currently, the web site identifies tigers and blue whales as worthy of global attention.

Government relations and policy review are also accessible via the WWF home page. The organization is consistently active in development of national and global policies that reflect the WWF mission. A section called "WWF and the New Administration" outlines how WWF works with the White House to convey policy recommendations and maintain progress on important environmental initiatives.

Based on my work in Maryland and working closely with the federal government, I was involved in amending the Clean Water Act to create the U.S. Environmental Protection Agency's National Estuary Program.

CURRENTS: Tell us a little bit about the primary mission of WWF.

EICHBAUM: Our basic mission is the conservation of life on earth. We seek to be the voice for those who have no voice. We carry that out by operating in a small number of places where the richness and biodiversity is unique or extensive... the Amazon, the Arctic, the Coral Triangle in Southeast Asia are key places. But we also work on a global basis to affect those global forces that will be detrimental for the survival of life in those places. We work on forestry practices, climate change, and fisheries from a global perspective. We work to transform markets particularly for commodity products. We also do work specifically on species-related conservation activities. We have identified flagship species, which are the critical ones that warrant our immediate and urgent attention. You might call our flagship species keystone species. For example, in the Arctic, working on the polar bear is critical. Right now,

we are sponsoring a global campaign to reverse the decline of tigers in the wild. We participated in a major summit in St. Petersburg in November 2010 to call global attention to the decline of tigers and bring the resources and political commitment on tiger conservation.

The species work is very important, but the place-based work is really at

scale. It's large places and our work on global threats and our history of working on protecting populations of threatened species that are being most successful. We weren't being successful at reversing the overall



WWF'S SAVE THE TIGERS CAMPAIGN

THE CHINESE ZODIAK calendar identifies 2010 as the Year of the Tiger, and WWF seized the opportunity to rally support for one of the earth's most endangered species. One-third of tiger subspecies have already been tagged as extinct, and according to WWF, as few as 3200 tigers remain in the wild—the lowest such figure in recorded history.

With a combination of celebrity, social media, and environmental consciousness, WWF launched the *Save the Tigers* initiative to cultivate awareness and gather support for the protection of six remaining tiger subspecies and their habitats. Tigers are routinely threatened by unlawful killing to support black market sales of animal skin, bones, and organs. Their natural surroundings are subject to illegal logging and bulldozing.

An estimated 12,000 Facebook users are among those lending support to the cause, which also boasts high profile Hollywood support from actors Leonardo DiCaprio and Dick Van Dyke.

Save the Tigers reached a critical impasse in November 2010 as environmental and global leaders met in St. Petersburg, Russia for the Tiger Summit, aimed at addressing the fate of this endangered species. An online petition called for the U.S. Government to support tiger conservation and Secretary of State Hilary Clinton to attend the Summit (Undersecretary Maria Otero actually led the U.S. Delegation). According to the petition, "U.S. involvement in the Tiger Summit will be central to its success and to achieving the required outcome for the survival and recovery of wild tiger populations."

WWF aims to double the number of tigers in the wild by the year 2022, when the 12-year Chinese calendar returns to the Year of the Tiger.



A Sumatran Tiger (*Panthera tigris sumatrae*) in Gunung Leuser National Park Sumatra, Indonesia.
Camera trap photo © Mike Griffiths/WWF-Canon



We are failing significantly as a global society to grapple with reducing greenhouse gas concentrations in the atmosphere.

trend of the loss of diversity and habitat. So we felt we needed to operate at a larger scale. The important thing about working at a larger scale is that you get much more involved in the lives of people. You

are no longer just protecting the environment. You are trying to ensure that as you protect wildlife habitat that, in fact, the people who are dependent upon those habitats actually get benefits from them.

CURRENTS: What's a good example of how local people might benefit from a species or habitat?

EICHBAUM: A good example, and one that involved the Navy, is in Mozambique.

COMMON INTERESTS: THE U.S. NAVY & MARINHA DE GUERRA

IN A PROJECT called *Support to the Marinha de Guerra (Mozambican Navy) for Improved Security along Coasts and in Conservation Areas*, the U.S. Navy has furnished more than a dozen inshore patrol vessels for all of Mozambique. In tandem with the equipment, Navy officials have trained more than 100 members of the Mozambiquan Navy in the operation and maintenance of small boat use. The project, which began in 2002, focuses on regions of high biodiversity and areas of conflict, including security measures to combat drug and human trafficking.

"WWF assisted the Navy to choose and prioritize these areas," according to WWF/USA's Caroline Simmonds, "which are also areas where WWF is working."

The areas selected include Quirimbas National Park, the proposed Primeiras and Segundas Marine Reserve area, the proposed Lake Niassa Reserve, and the Vamizi area of northern Mozambique.

"Since 2007," says Simmonds, "the U.S. Navy has also invited WWF staff to three seminars and the Mozambican Navy to one additional seminar for defining priorities for coastal security in Africa."

Security ranks as a top priority in the region, where the drug trade—and even the trade of humans—operates across oceans. According to a recent Reuters report, Mozambique is steadfastly becoming one of Africa's leading drug trade ports, moving significant amounts of hashish, cannabis, cocaine, and heroin to European countries. As a result, the U.S. Coast Guard also participated in training of the Mozambiquan Navy, emphasizing security, patrol, and interception of other inshore vessels.



"Early this year," Simmonds adds, "the U.S. Navy developed six radar/observation posts that pick up transponders on all commercial vessels—they can see ships that don't have transponders. This is crucial for scaling up coastal security enforcement."

The United States continues to lend its support to the security of Africa's waterfront, emphasizing the security of the seas as a major component of overall global security. To learn more about efforts in Africa, including the concept of Africa Partnership Station, visit www.naveur-navaf.navy.mil/apshome.html.



We have been working for over ten years with a large but not exclusive focus on coastal issues. In that process, we have set up with the Mozambique government a series of special management areas and highly protected areas.

As an example, one of those areas is called Quirimbus in the northern part of the country. It's got a big marine component, a big terrestrial component, and there are about 60,000 people that live inside of this 7,000 square kilometers special management area. One of the management strategies there is to have marine protected areas. The siting and location of those areas was very much done on a consultative basis with the local people, and the idea was to protect critical areas for the overall productivity of the fisheries resource, and for biological diversity.

The result is that there are overall more fish in the region, and the local people, in the areas where they do fish, have an ability to get a better and larger harvest. The U.S. Navy came into the picture when we found that the Mozambican Navy had virtually no boats. We worked with the U.S. Navy to see about getting boats and equipment to the Mozambique Navy so they could begin to do enforcement of zoning schemes within the protected areas. That was done in early 2000, and has been very effective.

CURRENTS: What are your main challenges today, and those that might exist five years from now?

EICHBAUM: Our overarching challenge is climate change which has a lot of dimensions that are of particular interest to the Navy. First of all, we are failing significantly as a global society to grapple with reducing greenhouse gas concentrations in the atmosphere. That failure will have, in this century, significant ramifications on our society.

Some of these dimensions relate to the marine environment. It's not just global warming, but also ocean acidification. As carbon increases and is absorbed into the ocean, that produces chemical changes that ultimately increase the acidity of the ocean. This acidification affects the viability of organisms in the ocean that depend upon calcifying processes to build their skeletons.

Basic building blocks of important fisheries could be affected, such as terrapods in the Arctic, that could affect

two of the four richest fisheries in the world. Coral reef systems could be affected.

I look at climate change issues through the lens of the Arctic, which is heating up about twice as fast as the average across the globe. Summer sea ice could possibly disappear within this decade. And winter ice, or multi-year ice, is less extensive and different in characteristic than it used to be. It is disappearing also.

So what does this mean? There are feedback loops globally from that process. Warming in the Arctic contributes to global atmospheric warming, so as the ice disappears you go from white to black surfaces. Black absorbs heat and does not reflect it. That heat goes into the oceans and is dissipated back, contributing to atmospheric warming. Because of changes in a variety of factors, you also begin to get changes in ocean currents that are driven out of the Arctic, and those changes can have profound impact on the productivity of not just the Arctic, but on all of the world's oceans in ways that we don't yet understand.

Changes in the Arctic are interesting because they will indicate that there is a lot more going on in the Arctic. It has already become a place for enhanced domain awareness.





Sea ice in the Beaufort Sea.
U.S. Fish and Wildlife Service

Changes in ocean currents that are driven out of the Arctic can have profound impact on the productivity of the world's oceans.

It's interesting to watch the public debate about the Arctic because there are the journalists who are hyping the rush to the Arctic for resources. And then you have governments who say, "No no no, that's all an orderly process. The Law of the Sea will determine how Arctic resources are divvied up." This is true. But the fact that people and governments are up there occupying, utilizing, and exporting doesn't mean that there won't be domain awareness. Part of this utilization will be new sea routes that reduce existing routes between critical places by as much as 25 to 30 percent, such as between Asia and

Europe. Sea routes have always been something that nations assured were militarily accessible and protected. While I think it unlikely that there will be outright conflict, I think there will be greater military presence. Considerations about presence by the United States in the area will be of growing importance.

From my perspective, seeing this potential for development, change, and cross-boundary issues, it will be of growing importance that the states of the Arctic vigorously join together to have a shared system for collaborative management of the Arctic—jointly thinking through problems while they

act within their national contexts to implement solutions to those problems.

At WWF, we argue for a much stronger system of collaborative governance among the Arctic nations than now exists.

CURRENTS: What is the WWF doing to promote this collaboration?

EICHBAUM: There is currently something called the Arctic Council which was created by the eight Arctic states in the mid-1990s. It's a think tank and not a decision-making body. It sponsors scientific studies and makes recommendations and issues guidelines based on that science. But

THE BASICS ABOUT THE LAW OF THE SEA TREATY

THE LAW OF the Sea Treaty, formally known as the Third United Nations Convention on the Law of the Sea (UNCLOS III), was finalized in 1982. Its purpose is to establish a comprehensive set of rules governing the oceans and to replace previous U.N. Conventions on the Law of the Sea, one in 1958 (UNCLOS I) and another in 1960 (UNCLOS II), that were believed to be inadequate.

Negotiated in the 1970s, the treaty was heavily influenced by the "New International Economic Order," a set of economic principles first formally advanced at the United Nations Conference on Trade and Development. That agenda called for "fairer" terms of trade and development financing for the so-called under-developed and developing nations.

Another way the New International Economic Order has been described is "redistributionist."

The Law of the Sea Treaty calls for technology transfers and wealth transfers from developed to undeveloped nations. It also requires parties to the treaty to adopt regulations and laws to control pollution of the marine environment. Such provisions were among the reasons President Ronald Reagan rejected the treaty in 1982.

In addition to the economic provisions, the treaty also establishes specific jurisdictional limits on the ocean area that countries may claim, including a 12-mile territorial sea limit and a 200-mile exclusive economic zone limit.

Some proponents of the treaty believe that it will establish a system of property rights for mineral extraction in deep sea beds, making the investment in such ventures more attractive.

(Source: The United Nations' Law of the Sea Treaty web site at www.unlawoftheseatreaty.org.)

those recommendations and guidelines are not binding or mandatory, and largely not followed by governments.

There's also an agreement on search and rescue now being negotiated among the states.

The WWF commissioned several academic scholars in Europe to look at the governance issues in the Arctic. They wrote several technical papers for us, published in the spring of 2010. Ultimately, the paper recommends a simple framework convention, legally binding, on the Arctic states and negotiated by those states to provide a general set of principles where they would agree to work together for the good of the Arctic.



Chenega Glacier, Prince William Sound, Alaska.
Julie St. Louis, U.S. Fish and Wildlife Service

Actual implementation would be different from topic area to topic area, but it would flow from a collaborative agreement and overarching understanding of the science and the threats to the Arctic.

WWF'S MARINE ARCTIC REPORT

IN 2010, WWF commissioned and published a report on International Governance and Regulation of the Marine Arctic, a region described by WWF as the "first and worst" area affected by climate change. The document—compiled by University of Lapland Professor Timo Koivurova and Researcher Erik J. Molenaar of the Netherlands Institute for the Law of the Seas—supports the mission of WWF's International Arctic Programme to prioritize the global impact of deteriorating Arctic climate conditions.

"In our proposal, we try to show the way to conduct ecosystem-based management in all of the Arctic marine area, very much building on a compromise between the Arctic and non-Arctic states," says Koivurova, emphasizing navigation and fishing rights as key factors. "We need to have 'one voice'—one single regional governance structure—to enable long-term planning horizon and concerted policy guidance."

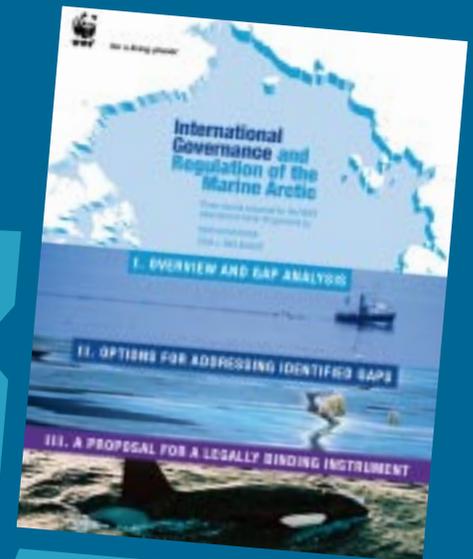
The disabling absence of results-oriented institutions and inconsistent mandates have led to regulatory gaps,

according to the report. The seemingly ineffective Arctic Council, formally established in 1996, exerts no legally binding influence and limits participation of non-Arctic states despite their inevitable role in the ecosystem. In contrast, the WWF's proposal warrants "a new legally binding comprehensive agreement with a new institutional setup which will be able to ensure protection and preservation of the Arctic Ocean and sustainable ecosystem-based management of its resources."

The Arctic report identifies four critical elements of such an agreement, including:

1. Preservation of ecological processes
2. Long-term conservation and equitable use of marine resources
3. Current and future socio-economic benefits
4. Actions to address impending climate change

"What we envisage are such things as the precautionary principle, managing the area on the basis of science, ecosystem-based knowledge, and appropriate impact assessments," according to



Eichbaum. "And then they would set a series of priority areas for action, and negotiate detail and protocols."

Says Molenaar, "I think none of the Arctic states disagree that reform of the Arctic legal regime is necessary. The debate is only on the type and level of such reform."

The International Governance and Regulation of the Marine Arctic report and summary is available at www.worldwildlife.org via Places > Arctic > Publications > Reports.



Alaska salmon.
U.S. Fish and Wildlife Service

If there are fish there tomorrow, that's better economically than catching all of the fish today.

Thus far, there doesn't seem to be very much interest at any official level in any government to take this on. Governments seem to be quite happy with the Arctic Council functioning as a study group and not as an action-oriented organization.

CURRENTS: What sorts of marine initiatives is WWF sponsoring?

EICHBAUM: There are several critical places where we work. They include the Arctic, the Galapagos, the Coral Triangle, Philippines, Indonesia, Malaysia, New Guinea, and Fiji—the home of much of marine biodiversity,

especially unique and rich corals and other taxon. We work in coastal East Africa from Kenya to the southern part of Mozambique. We have presence in the Gulf of Mexico and the Mesoamerican reef. Plus, my WWF international colleagues are very active in West Africa and the South China Sea.

In coastal East Africa, we work at a place called Kiunga, in the north of Kenya, where you can practically look over the border to Somalia. We're working there on the coast, with coastal communities, to preserve the wildlife and biodiversity. But we also work on health clinics, job creation

opportunities, microfinance, and those types of things to protect the environment in a way that is good for the people and brings stability to the area.

If you go to the Coral Triangle and Indonesia, you will discover issues of food security. Reliance on the sea is very, very important. So long-term fisheries sustainability is vital to the livelihood and stability of the region.

Globally, we have a large initiative on fisheries, where we try to bring sustainable practices to the world's fisheries. Most people know that nearly 70 percent of the commercial fisheries around the world are overfished or fished to capacity. The high seas pose a particularly critical problem because the governance regimes there are very weak. That's a very large focus for us—to bring new innovative practices to try to protect the world's fisheries.

We do this through two linked and parallel strategies. One is to strengthen the regional fish management organizations. Secondly, we try to achieve more economically viable fisheries where the fishermen really have an economic stake in sustainable management. If there are fish there tomorrow, that's better economically than catching all of the fish today.

As an example of a partnership, we work with industry, government, and other NGOs. It gets very complex particularly when economic issues become significant. We identify partners in industry that feed the world, who may look at the world through a more economic lens than we do, but

THE NATIONAL OCEANS POLICY

IN 2010, PRESIDENT Obama announced the creation of a new National Ocean Council with the vision of engaging educated and productive stewardship of the country's oceans, coasts, and Great Lakes region. The Council, comprised of representatives from a vast array of federal agencies, will promote a National Oceans Policy enacted by the President to maintain these invaluable regions as "healthy and resilient, safe and productive, and understood and treasured."

Highlights of the ten-point policy include:

- ▲ Bolster the conservation and sustainable uses of land in ways that will improve the health of ocean, coastal, and Great Lakes ecosystems.
- ▲ Use the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes, and enhance humanity's capacity to understand, respond, and adapt to a changing global environment.
- ▲ Exercise rights and jurisdiction and perform duties in accordance with applicable international law, including respect for and preservation of navigational rights and freedoms, which are essential for the global economy and international peace and security.
- ▲ Increase scientific understanding of ocean, coastal, and Great Lakes ecosystems as part of the global interconnected systems of air, land, ice, and water, including their relationships to humans and their activities.

their long-term viability is dependent upon the sustainability of that world. That sustainability will protect biodiversity, so our interests overlap. So whether its Coca-Cola on fresh water, or the tuna industry on tuna conservation, partnerships become an important part of what we do.

CURRENTS: Can you talk about where we might find collaboration opportunities between the Navy and WWF?

EICHBAUM: The Law of the Sea Convention is a good example. We'd like to see it get ratified. I think the Navy would like to see it ratified, and DoD has testified in front of Congress to that effect. I don't think we have much to offer about the details of how the Navy would operate in any given place in the context of the Law of the Sea, but it's in both of our interests to see it happen.

CURRENTS: How does public perception of NGOs affect WWF's efforts?

EICHBAUM: Public perception is critically important. If you look back at the period of the 1960s and 1970s, you had Congress and President Nixon making extraordinarily important and fundamental steps in response to public clamor to put into place laws to protect the air, the water, and manage solid waste. Today, fifty years later, you have the opposite—a complete polarization in the political arena where one side is denigrating the science and arguing that responsible agencies should have reduced

capacities to address these issues.

Why has that shift occurred? I'm not sure that I have the answer, but it clearly has occurred and it has a significant impact on our ability to do our job. The rejection of science as an instrument that informs public policy is a very, very worrisome trend in this country because it rejects the idea of, 'I will observe, I will learn, and I will act upon what I observe and learn.'

It's almost a complete rejection of rational thought. Why are we in such a worrying time? I think the proximate reason is the economic situation. The American public is worried in a way they have not been for four generations.

CURRENTS: It could be that your message may be lost among so many other issues facing Americans today.

EICHBAUM: We're in a communications world that is fast and unmediated so that any message gains currency by its repetition, not by its validity. As an example, the environmental community collectively last year spent more money than it ever has in an effort to educate the public around issues of climate change and energy legislation. We were trying to explain why it was particularly important that Congress act. But by the end of that year, there were fewer people who believed in the issue or the need for action than at the beginning of the year.

CURRENTS: How might the Navy and the WWF collaborate in the execution of the National Oceans Policy?

EICHBAUM: We think that what the President signed in July 2010 is very, very good. It's a big step forward. Now, we are thinking about what might be the most positive, constructive way that we can be involved in ongoing implementation. I'm most interested in the Arctic and how we implement up there. Under the policy, there is an immediate short term Arctic strategy that has to be done in six to eight months. I'm also interested in the area of marine spatial planning. It will be a great project to see what marine spatial planning really is for the United States. I think it's really important that everyone come to that process with an open mind and a willingness for vigorous debate, transparency, and flexibility. Active engagement of it, and being supportive of it, would be really important. 



FOR MORE INFORMATION

FOR MORE DETAILS and additional perspective about Marine Spatial Planning, read our spotlight interview with Kristen Fletcher, Executive Director of the Coastal States Organization in the summer 2010 issue of *Currents*.

