

# Socioeconomic News

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Newsletter of the Socioeconomic Section of the American Fisheries Society

Spring 2005

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## From the President's Desk

### Greetings!

I'm halfway through my third year as President of the Socioeconomics Section and there is light at the end of the tunnel. During my highly anticipated fourth and final (lame duck) year as president, we hope to elect a new president-elect and secretary/treasury who will provide new energy and direction to the section (see the Fall 2004 *Socioeconomics News* for Peter Fricke's "step down" announcement).

As you may be painfully aware, my efforts to recruit a president-elect have failed. I asked a person in the know at AFS headquarters about what happens when section offices are not filled. Here is the reply: "I know in the past when a unit is in trouble with no interest and when all seems dire someone does step up to the plate. The last resort is to disband the unit officially. We usually leave it open for a few years before doing that. Thanks for the heads up." Hopefully, someone will "step up to the plate soon" (*if you think that you might be willing and able to serve as president-elect and then president of the section for at least one year, please let me know*). The alternative is not attractive – no Socioeconomics Section. If you think that the AFS can do without a Socioeconomics Section, make sure that you finish reading this column [see the \* below].

The 2005 AFS Annual Meeting is scheduled for September 11-15 in Anchorage, Alaska. We will sponsor a fabulous symposium around the broad theme of socioeconomics of western U.S. fisheries. The symposium is titled "Fisheries, Fishermen, and Fishing Communities: Socioeconomic Perspectives on the West Coast, Alaska, and Hawaii." It includes 23 presentations and 1 poster with a good balance of "socio" (10 papers, 1 poster) and economics (13 papers). You can find the symposium described elsewhere in this newsletter and the abstracts on the section's website [URL: [www.fisheries.org/socioecon/sessions/2005.html](http://www.fisheries.org/socioecon/sessions/2005.html)].

We are currently working to increase participation in the Weithman Award (for best student socioeconomics paper at the annual meeting) competition this year. As we did last year, we will be asking the Anchorage organizers for a list of student presenters in human dimensions sessions (there were only 6 on 2004). We

have sent announcements to Presidents of AFS divisions and chapters and an announcement will appear in the May *Fisheries* magazine. See the call for papers elsewhere in this newsletter. Note that papers are not required this year and the deadline is July 1.

Socioeconomics Section member Wayne Davis (retired, Kentucky Department of Fish and Wildlife Resources) and Rob Southwick led two Section-sponsored continuing education workshops “Investigation and Valuation of Fish and Mussel Kills” at the Oklahoma and Nebraska AFS Chapters’ annual meetings (i.e., two trips to the plains in the middle of winter ... brrrrrr!). Plans are under way to present the workshop this summer for the Michigan and Indiana chapters. Wayne and Rob report that the turnout has been good and the participants have been enthusiastic. Many thanks to Wayne and Rob for representing the section well.

Peter Fricke did his usual excellent job of being the heart and soul of the Section by attending the AFS Governing Board meeting in March. See the Section’s Midyear Meeting report and Peter’s report elsewhere in the newsletter. Thanks Peter!

Results are in from the section name change proposal (i.e., Human Dimensions Section) that was floated in the Fall 2004 *Socioeconomics News*. The bottom line is that one-third of the section respondents (5 out of 15) are opposed to a name change. Therefore, it doesn’t seem like the right direction for the section to go at this time.

Also reported in the Fall 2004 *Socioeconomics News*, the AFS is currently dealing with the issue of economic growth and fish conservation. The AFS Water Quality Section membership recently voted 13 to 1 to forward their policy statement to the AFS Resource Policy Committee for consideration as an AFS policy statement (see their correspondence in this newsletter).

In response to this proposal and the 2005 *Fisheries* “economic growth forum”, Doug Lipton, Frank Lupi, Rob Southwick, and myself authored an essay entitled “Economic Growth and Environmental Protection: A Clarification about Neoclassical Economics.” The short version appears in the April issue of *Fisheries*. The long version appears in this newsletter. [Also see “What DO the Dismal Scientists Really Think?” elsewhere in the newsletter.] The Resource Policy Committee received the Water Quality Section’s proposal and our “clarification” and, in consultation with 2004-05 AFS President Barbara Knuth, returned the proposal to the Water

Quality Section with instructions for them to form a joint working group with the Socioeconomics Section to hammer out an appropriate AFS policy statement on economic growth and fishery conservation. The revised AFS policy statement proposal will then return to the Resource Policy Committee and move through peer-reviews and Society-wide review before being proposed as a formal AFS policy. The time frame for this is typically 3-5 years. Yikes!

Currently the participating Socioeconomic Section members include Doug Lipton, Frank Lupi, Rob Southwick, and myself. We look forward to working with the Water Quality Section. If you would like to participate in this effort please let me know. This invitation especially includes the non-economist members of the section. Please consider this effort as a way to better inform AFS members of the ways in which the social sciences can contribute to discussions of fishery conservation, ecosystem management and sustainability.\*

Again, the 2005 AFS Annual Meeting is scheduled for September 11-15 in Anchorage, Alaska. The meeting theme is “Creating a Fisheries Mosaic: Connections across Jurisdictions, Disciplines, and Cultures.” The Socioeconomics Section will hold its annual meeting on Sunday, September 11 from 3-5 p.m. (stay tuned for more details via e-mail and on the section’s website) and the aforementioned Symposium. I hope to see you in “Anchortown” in September!

John Whitehead  
President, AFS Socioeconomics Section

\* By the way, do you still think that the AFS can do without a Socioeconomics Section?



-- Destination: **Anchorage**...hope to see you there!

**Issue Paper – Economic Growth**  
**Prepared by American Fisheries Society Water Quality Section**  
**January 27, 2005**

**Topic:** Economic growth

**Issue:** Economic growth is an increase in the production and consumption of goods and services. It is a function of increasing human population and per capita consumption, and is generally indicated by increasing gross domestic product. It has become a primary domestic policy goal of the American public and polity.

It is becoming increasingly apparent, based on well-established principles of ecology and empirical evidence, that there is a fundamental conflict between economic growth and fish conservation. Due to the tremendous breadth of the human niche, which expands via technological progress, the human economy grows at the competitive exclusion of nonhuman species in the aggregate. Causes of species endangerment in the U.S. reflect the structure of the American economy, including agricultural and extractive sectors, manufacturing sectors, service sectors, economic infrastructure (e.g., wells, canals, reservoirs), byproducts (i.e., pollutants), and incidental effects including the introduction of non-native invasive species.

Numerous fisheries, commercial and non-commercial, serve to illustrate the conflict between economic growth and fish conservation. For example, the Atlantic cod, a significant economic good throughout American history, has declined primarily as a result of fishing (an extractive sector). Numerous Colorado River fish species have been endangered largely by the construction of dams (economic infrastructure). Salmon stocks in the Pacific Northwest are threatened by a combination of economic sectors (agriculture, logging, mining, livestock grazing, and fishing) and infrastructure (dams, roads). These and many other fisheries are impacted by the byproducts of economic production (i.e., pollution) and incidental effects of economic production (e.g., invasive species as a function of international trade and interstate commerce). The causes of fish species endangerment invariably reflect the propensity of the human economy to grow at the competitive exclusion of fish and other non-human species.

Many Americans do not appear to be aware of the conflict between economic growth and fish conservation. This is due partly to a lack of ecological training among the public, and partly to a lack of ecological expertise among conventionally trained economists who provide the most prominent recommendations to policy makers. The typical position taken by growth economists is that more economic growth is required to afford environmental protection and conservation programs. That position is known in the economics profession as the “environmental Kuznets curve” but has been severely criticized in and out of the economics profession, especially when applied to macroeconomic scenarios such as economic growth and the environment at large. The environmental Kuznets curve is promoted by various economic interests in the private and public sectors which benefit in the short term from strong pro-growth policies.

The Water Quality Section believes that the long-run prospects for fish conservation will depend on the establishment of a steady state economy (stabilized population times per capita consumption). The optimum size of a steady state economy may vary based upon the technological regime, but there is a limit to economic growth and a fundamental conflict between economic growth and fish conservation no matter which technological regime is adhered to. This position has been clearly taken by The Wildlife Society, the Society for Conservation Biology’s North America Section, and the United States Society for Ecological Economics. Only by developing solidarity on this issue can the natural resources professions lead the American public and policy makers into a more informed discussion and decision-making process to plan for the appropriate amount of compromise between economic growth and ecological integrity, including fish conservation.

**Recommendations:** The Water Quality Section envisions and seeks the adoption of an AFS position on economic growth. This position should begin by clearly and concisely articulating the following points:

- 1) Economic growth is an increase in the production and consumption of goods and services.
- 2) Economic growth occurs when there is an increase in the product of population multiplied by per capita production and consumption.
- 3) Economic growth is often and generally indicated by increasing real gross domestic product (GDP) or real gross national product (GNP).
- 4) Based upon established principles of physics and ecology, there is a limit to economic growth.
- 5) A steady state economy is generally indicated by stabilized (or mildly fluctuating) real gross domestic product (GDP) or real gross national product (GNP).
- 6) A steady state economy, with a stabilized (or mildly fluctuating) product of population multiplied by per capita consumption, is an alternative to economic growth; and;
- 7) A steady state economy, with stabilized (or mildly fluctuating) production and consumption of goods and services, is an alternative to economic growth.
- 8) The American economy grows as an integrated whole consisting of agricultural, extractive, manufacturing, and services sectors that require physical inputs and produce wastes.
- 9) There is increasing evidence that North American economic growth is having negative effects on the long-term ecological and economic welfare of North America and the world.

Therefore, the Water Quality Section suggests an AFS position include the following, at a minimum:

- 1) There is a fundamental conflict between economic growth and fish conservation based on the ecological principle of competitive exclusion.
- 2) There is a fundamental conflict between economic growth and the ecological services underpinning the human economy (for example, pollination, decomposition, climate regulation).
- 3) Technological progress occurs via research and development that requires funding and the use of natural resources, has many positive and negative ecological and economic effects, and may not be depended upon to reconcile the conflict between economic growth and fish conservation.
- 4) A steady state economy is a viable, sustainable alternative to a growing economy and has become a more appropriate goal in the larger, wealthier economies of North America.
- 5) The long-run sustainability of a steady state economy requires its establishment at a size that does not breach ecological and economic capacity during expected or unexpected supply shocks such as droughts and energy shortages.

(continued)

The Water Quality Section suggests AFS also consider including the following points in a position on economic growth:

- 1) Because of its negative effects on long-term ecological and economic welfare, economic growth is an increasingly dangerous and anachronistic American goal.
  - 2) A steady state economy does not preclude economic development, a qualitative process in which different technologies may be employed and the relative prominence of economic sectors may evolve.
  - 3) Upon establishing a steady state economy, it would be advisable for the United States to assist other nations in moving from the goal of economic growth to the goal of a steady state economy, beginning with those nations currently enjoying the highest levels of per capita consumption.
  - 4) For many nations with widespread poverty, increasing per capita consumption (or, alternatively, more equitable distributions of wealth) remains an appropriate goal for the time being, yet the ultimate goal should be the establishment of healthy ecological and social conditions within the framework of a steady state economy.
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***“I know in the past when a unit is in trouble with no interest and when all seems dire someone does step up to the plate. The last resort is to disband the unit officially. We usually leave it open for a few years before doing that. Thanks for the heads up.”***

***- AFS Headquarters Official***

**Please place a checkmark in the box next to your best answer to the following statement:**

I believe that the American Fisheries Society would be better off without a Socioeconomics Section.	
<input type="checkbox"/>	Strongly agree
<input type="checkbox"/>	Somewhat agree
<input type="checkbox"/>	Neither agree nor disagree
<input type="checkbox"/>	Somewhat disagree
<input type="checkbox"/>	Strongly disagree

If you checked “somewhat disagree” or “strongly disagree”, please consider a self-nomination for a one-year term as president-elect and (at least) a one-year term as president of the Socioeconomics Section. Nominations may be sent to John Whitehead at [whiteheadjc@appstate.edu](mailto:whiteheadjc@appstate.edu).

## Economic Growth and Environmental Protection: A Clarification about Neoclassical Economics

John Whitehead, Appalachian State University<sup>1</sup>  
 Doug Lipton, University of Maryland  
 Frank Lupi, Michigan State University  
 Rob Southwick, Southwick and Associates

A recent article (Czech et al. 2004) and the “economic growth forum” series of articles (Czech and Pister 2005) in the American Fisheries Society’s (AFS) monthly publication *Fisheries* consider the relationship between economic growth and environmental protection, specifically fish conservation.<sup>2</sup> These articles highlight an important social concern: unfettered pursuit of profit by business firms will lead to the degradation of the environment and the overuse of natural resources, including fisheries. Czech and Pister claim that mainstream economists ignore the problem:

“Neoclassical economists, micro and macro, typically opine that there is no practical limit to economic growth and, as a corollary, no inevitable conflict between economic growth and environmental protection (including fish and wildlife conservation).”

As neoclassical economists, we disagree with this statement and would like to address the possible misperception among AFS members and other fisheries professionals about the appropriate role of economists and their use of economic analysis in the allocation of scarce fishery resources.

This essay briefly summarizes the economic way of thinking regarding natural resources and the environment. We consider both microeconomics and macroeconomics. We hope to leave the reader with the impression that neoclassical economists recognize the tradeoffs between economic activity and environmental quality and sustainable natural resource use. However, our policy prescriptions are very different than those proposed in recent *Fisheries* articles.

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<sup>1</sup> Contact Author: whiteheadjc@appstate.edu. The authors thank Steve Edwards and Leroy Hushak for helpful comments. This essay has also benefited from a conversation with Brian Czech. For a different look at the opinions of economists concerning economic growth and environmental protection, see “What DO the Dismal Scientists REALLY Think?” in this newsletter. The views expressed in this essay are not necessarily those of the AFS Socioeconomics Section.

<sup>2</sup> See also the Spring 2000 special issue of the *Wildlife Society Bulletin*.

### Microeconomics

A standard definition is that economics is the study of the allocation of scarce resources. Scarcity is due to the simple fact that people in society would like to consume more goods and services than there are resources such as labor, capital, and natural resources (e.g., fisheries) available to produce the goods and services. Because of scarcity people must make choices about what and how they consume. Choices involve tradeoffs among different alternatives and when any alternative is chosen there is a cost. The “opportunity cost” is the value of the best alternative that is not chosen.

Consumption alternatives can be market alternatives. For example, those in society may choose to consume sport utility vehicles rather than high performance sports cars. Consumption alternatives can also be “non-market” alternatives. For example, those in society may choose to consume more gas guzzling sport utility vehicles and less clean air. Non-market goods and services are those things that provide satisfaction to people in society but are not purchased in a market. These things may include clean air, clean water, a recreational fishing trip or simply the knowledge that an endangered minnow thrives in its natural habitat.

The economic analysis of the environment is standard in all mainstream introductory economics courses and textbooks.<sup>3</sup> The standard analysis is due to A.C. Pigou (1920). Consumers and business firms do not take into account the negative impacts of production on the environment when making consumption and production decisions. Consumers may be unaware of the harmful impacts of the production process that generates the products they purchase or overlook them due to budget constraints. Business firms don’t consider the harmful impacts of pollution because consideration of the environment in the production process will raise the costs of production and lower profit.

The unregulated market outcome leads to what is known as a negative externality. The economic analysis of negative externality concludes that markets fail to allocate resources efficiently, specifically, production in unregulated “dirty” industries will be too high and the prices of these products will be too low because they do not reflect the “social cost” of pollution. The standard textbook policy is to tax the output in the polluting industry. The tax leads to lower output, higher prices, and less pollution. The tax does not eliminate pollution but, if

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<sup>3</sup> For example, see the best selling economics textbook authored by the current chair of the President’s Council of Economic Advisors: Mankiw (2004).

the benefits of pollution control are known, it can be designed to reach an “optimal level of pollution” which is where the difference in the benefits and costs of pollution control are maximized.

The standard introductory economics courses and textbooks also address another market failure: the overharvesting of fisheries, and other open-access resources. The standard analysis is due to H. Scott Gordon (1954). An open-access resource is owned by no one until it is extracted. The absence of property rights provides an incentive to profit maximizing business firms to extract the resource before their competitors and ignore the impact of current harvest on future recruitment. This “race for the fish” leads to the overharvesting problem. A standard textbook solution to this problem is to tax effort, in other words, tax the activities that lead to overharvesting. Taxation reduces effort and harvest, and can lead to the optimal effort level where the difference between the benefits and costs of harvest are maximized. The economic goal is to maximize the sustainable value of the fishery.

The consideration of environmental and natural resource economics is not limited to the introductory level. Most colleges and universities offer upper-level courses in this topic. There is a wide variety of upper-level environmental and natural resource economics textbooks to choose from. These have a variety of perspectives ranging from neoclassical economics to ecological economics.<sup>4</sup> The courses are typically populated by economics majors, environmental studies majors, and others with an interest in environmental issues. Compared to the simple taxation policies of introductory economics, these courses provide more sophisticated and successful incentive-based approaches to environmental and natural resource allocation problems.

The basic environmental economic problem is the absence of property rights. No one owns the air we breathe or the fish in the ocean. A property rights approach has emerged as a more viable policy alternative to pollution and effort taxation. The EPA’s Acid Rain Program is well known example of this approach. The EPA implemented a system of tradable pollution permits in the 1990s that has led to low-cost and large reductions in SO<sub>2</sub> emissions. In fisheries, individual transferable quotas have been implemented in Iceland, New Zealand, and elsewhere leading to more sustainable harvest and reductions in overcapitalization. While questions remain, for example, about the equitable allocation of permits and quota, pollution hotspots, and negative impacts on fishing communities, it is clear that neoclassical economics is an important contributor to the achievement of environmental quality and sustainable resource use.

<sup>4</sup> See Kahn (2005) for an example of a textbook that embraces both neoclassical and ecological perspectives.

## Macroeconomics

Most introductory economics textbooks list the three goals of macroeconomics as economic growth, full employment and price stability. Economic growth is typically measured by increases in the gross domestic product (GDP). GDP is the product of population and GDP per capita. Economic growth is achieved through population increases, higher standards of living, or both. Full employment is achieved when the unemployment rate reaches a level that does not ignite inflation (i.e., the “natural rate of unemployment” is considered to be about 5.5%). The GDP growth rate and the unemployment rate usually move in opposite directions. Price stability is achieved when the inflation rate is low and fairly constant. While there is debate about the tradeoff between the unemployment rate and inflation (i.e., the Philips curve), economic policy makers (e.g., the Federal Reserve) implement macroeconomic policy to slow down economic growth when price stability is threatened. This indicates a macroeconomic limit to economic growth that can not be overcome by technology. Even without considering environmental quality and natural resource use, there is a “practical limit to economic growth.” The limitation is the scarcity of labor, capital, natural resources, and technology that can lead to inflation. No amount of government policy can overcome these constraints.

The GDP is nothing more than the summation of all purchasing decisions made by individuals, businesses, and the government. Economic growth or contraction (i.e., recession) is largely driven by millions of everyday individual decisions, not government policy. Government policy can only help influence economic growth by affecting some of the variables behind people’s purchasing decisions including: interest rates, taxes, public spending.<sup>5</sup> Macroeconomists have also considered environmental issues.<sup>6</sup> According to the national income accounting identity, GDP is a good measure of national income and a proxy for economic well being. However, economists have long been aware that GDP does not do a good job of measuring many activities that contribute to economic well-being such as child-rearing, leisure activities, and the enjoyment of environmental amenities.

<sup>5</sup> For example, it is commonly believed that the Federal Reserve (Fed) sets (i.e., mandates) the level of (all) interest rates. In fact, the Fed only directly influences very short term rates (e.g., with maturities less than one year) by buying and selling Treasury bills. Short term interest rates do not have a major impact on economic activity. Long term interest rates are not directly influenced by the Fed but can have an important impact on economic activity (e.g., mortgage rates). The weakness of the Fed in this regard has been recently illustrated by the decrease in mortgage interest rates while the Fed increased short term interest rates during the later part of 2004.

<sup>6</sup> For a more detailed treatment of the issues in this section see Chapter 6 of Kahn (2004).

This issue is prominent in most introductory economics textbooks. Mainstream macroeconomists have been busy trying to correct these problems in the measurement of economic well-being. One of the thrusts of this research is to incorporate the value of the environment and the cost of natural resource use in “green GDP.”<sup>7</sup>

Environmental regulation diverts business firm resources away from production, raising the cost of production and reducing economic growth. Macroeconomists also consider the positive, as well as the negative, effects of environmental protection on economic growth. Macroeconomists have documented important costs of environmental pollution such as the negative health impacts of pollution and the resulting losses in labor productivity. Environmental regulation leads to improved labor productivity and increases in economic growth. One EPA study finds that air quality regulation actually increases GDP when both the negative and positive impacts are accounted for (Gillis, et al., 1996).

Another macroeconomic issue is the long-term relationship between economic growth and environmental quality throughout the long run process of economic development. One pattern is the environmental Kuznets curve, the statistical finding that some measures of environmental quality first fall but then rise with per capita GDP growth. An economic explanation is that as a country goes through the initial stages of industrialization and economic growth, environmental quality worsens. Over time, however, as income increases the public demand for environmental quality increases and more public policy is focused on environmental protection. For example, Earth Day, the establishment of the Environmental Protection Agency, and the resulting gains in air and water quality were partially the result of a rise in per capita GDP.

While the environmental Kuznets story is logical from a neoclassical economic perspective the statistical evidence is mixed (Dasgupta et al. 2002). Some pollutants do not obey the Kuznets curve pattern and among neoclassical economists, the jury is still out concerning whether the environmental Kuznets curve should be used to guide macroeconomic policy. It is a reach to state that neoclassical economists use the environmental Kuznets curve to justify pursuit of unregulated economic growth.

### Conservation Reconsidered

In his influential article “Conservation Reconsidered,” published in the American Economic Association’s top-rated journal, the *American Economic Review*, Krutilla (1967) argues that the amenity value of the environment and natural resources will rise over time.

<sup>7</sup> According to Banzhaf (2005), “Japan, Germany, and Sweden currently compute some form of green economic account, and the US National Academy of Sciences has endorsed the concept (Nordhaus and Kokkelenberg, 1999).”

Technological progress has allowed society to squeeze more goods and services out of the limited supply of natural resources. The substitution of technology for nature in the production of goods and services drives the extractive value of natural resources downward. As these resources are extracted, their ability to provide non-market amenities, such as recreational fishing, wilderness adventure, and other communes with nature, are diminished. The increased scarcity of these amenities drives their economic value upwards. The implication is that to achieve the optimal amount of environmental quality and sustainable natural resource use, society should increasingly pursue more environmental and natural resource protection, not because of strict limits imposed by national production constraints but because of the increasing social costs of continued environmental degradation.

Krutilla further argued that the environmental benefits traditionally considered for benefit-cost analysis, those enjoyed by on-site users of the natural environment (e.g., water-based recreation), were a narrow component of the total value of the environment. With increasing scarcity of natural environments other non-user groups should be considered. These groups may include those who value natural environments so that others, current or future, may use them. Altruistic and bequest values are one component of the total value of environmental quality and sustainable resource use. Others may value the environment because it exists in its natural state making existence values another component.

After publication of Krutilla’s article, the “non-market valuation” research agenda to measure environmental and natural resource amenity values has been pursued by hundreds of neoclassical economists. One focus has been the difficult issue of how best to measure “non-use” values. Contingent valuation emerged as one solution. The contingent valuation method relies on answers to hypothetical willingness to pay survey questions to develop estimates of non-use values. These days, the contingent valuation method is, arguably, the most popular environmental benefit estimation methodology. Use of the contingent valuation method has had major public policy implications. It was used by economists employed by the State of Alaska to estimate the natural resource damages, including non-use values, due to the Exxon Valdez oil spill (Carson et al. 2003). Consequently, the State of Alaska and Exxon agreed on \$1 billion in damages and Exxon spent \$2 billion on cleanup. The role of non-use values and the contingent valuation method is still under considerable debate; however, the ideas of Krutilla have become part of the neoclassical environmental economic paradigm and implementation of these ideas has become practical and policy relevant.<sup>8</sup>

<sup>8</sup> See the symposium on the contingent valuation method in the Fall 1994 issue of the American Economic Association’s *Journal of Economic Perspectives*.

## Conclusions

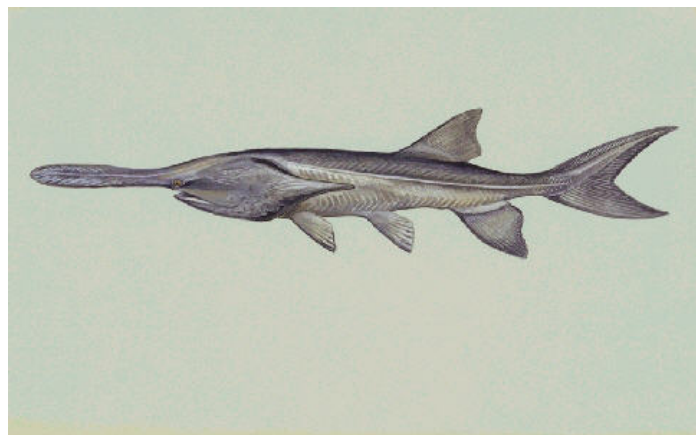
A basic understanding of neoclassical economics would lead one to conclude that neoclassical economists recognize the tradeoffs between economic growth (i.e., increases in GDP) and environmental protection (e.g., fish conservation). The neoclassical microeconomic perspective is that society should pursue clean environments and limitations on natural resource use so that the difference between the benefits and costs of these pursuits is maximized over time. The goals of macroeconomics include the achievement of economic growth while avoiding high inflation. Many neoclassical macroeconomists believe that environmental regulation is a drag on economic growth and some argue for reduced regulation. However, others argue that unfettered development damages labor productivity and economic growth. Millions of undergraduate college students have been exposed to this perspective. It is too simple to state that neoclassical economics pushes the goal of economic growth while ignoring the benefits of environmental protection.

The AFS should strive to ensure that fisheries professionals are engaged in the public debate regarding economic activity and the costs that it imposes on fisheries and the environment. In particular, the public needs to be educated regarding the value of fisheries and fisheries habitat and the types of policies that need to be adopted to ensure that society receives the maximum social value from our fisheries resources. To change economic policy, we must educate the public and government leaders about the costs of degrading fisheries and the environment, and how ordinary consumer choices may lead to these costs. When more people agree with these concerns, economic policy and individual consumption behavior will change. We hope that AFS members recognize the usefulness of neoclassical economic analysis to prescribe improved policies for environmental protection and sustainable natural resource use.

Czech et al. (2004) propose a major change to macroeconomic policy (i.e., a steady state economy with zero growth<sup>9</sup>). The problems raised are real, but the proposed solution is extreme. The AFS should focus on policies that educate economic experts, government leaders and the public about the negatives associated with unregulated economic activity. The AFS should argue that society should pursue more fisheries conservation, not by imposing strict limits on GDP, but because it is in the best interests of society due to the increasing social costs of continued environmental degradation.

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-- Paddlefish (USFWS, Duane Raver)

<sup>9</sup> See the Center for the Advancement of the Steady State Economy website at <http://steadystate.org>.

## What DO the Dismal Scientists Really Think?

Whitehead, Lipton, Lupi, and Southwick feel the need to provide a “clarification” about neoclassical economics. Oftentimes there seems to be some confusion about the opinions held by economists on a variety of social issues, including environmental quality and natural resource use. Fuller and Geide-Stevenson (2003) surveyed a random sample of members of the American Economic Association ([www.aeaweb.org](http://www.aeaweb.org)) in 2000. Fifty-eight percent of the 300+ respondents were in academics, 16 percent were in government, and 21 percent were in the private sector. Respondents were presented with 44 “propositions” and asked whether they mainly agreed, agreed with provisions, or mainly disagreed.

Considering first two propositions related to the environment provides some insight into what economists think about the role of environmental regulation.

<b>Proposition</b>	<b>Mainly Agree</b>	<b>Agree with Provisions</b>	<b>Generally Disagree</b>
Reducing the regulatory power of the Environmental Protection Agency would improve the economic efficiency of the U.S. Economy.	16.4%	20.5%	58.7%

<b>Proposition</b>	<b>Mainly Agree</b>	<b>Agree with Provisions</b>	<b>Generally Disagree</b>
Pollution taxes or marketable pollution permits are a more economically efficient approach to pollution control than emission standards.	63.1%	29.9%	6%

Most economists (59%) recognize that pollution can lead to reduced economic efficiency (e.g., unhealthy workers aren’t very productive). Without environmental regulation economic growth might actually suffer if business firms are allowed to pollute in order to maximize short-term profits. Most economists (93%) believe that the “command and control” type of policy (i.e., technological standards, fishing seasons and gear restrictions) that dominates environmental and natural resource regulatory approaches is misguided. In contrast, economic incentive policies (i.e., pollution trading, individual transferable quotas) lower the regulatory costs imposed on businesses. Lower regulatory costs can be used to (1) increase the profits that businesses earn or, (2) achieve greater levels of environmental quality and natural resource conservation, or (3) both.

Responses to a few of the macroeconomic propositions provide an impression about the views of economists towards economic growth.

<b>Proposition</b>	<b>Mainly Agree</b>	<b>Agree with Provisions</b>	<b>Generally Disagree</b>
Changes in aggregate demand affect real GDP in the short run but not in the long run.	28.9%	30.9%	35.9%
Management of the business cycle should be left to the Federal Reserve; activist fiscal policy should be avoided.	35.6%	35.2%	28.2%
The Federal Reserve should focus on a low rate of inflation rather than other possible goals such as employment or economic growth.	41.3%	29.2%	27.9%

Sixty percent of economists generally agree that fiscal policy (i.e., changes in tax rates and government spending) and monetary policy (i.e., changes in interest rates) don't affect the long run growth prospects of the economy. In other words, macro policy can help an economy overcome a recession, but can't increase the productive capacity of the economy. Further, 70% of economists generally think that changes in tax rates and government spending should not be used to manage an economy over the course of the business cycle. This role should be left to the Federal Reserve. Finally, the Federal Reserve, within its role of managing the business cycle, should focus on prices instead of output. The combination of opinions about these three statements is that most economists believe the level of long term economic growth to be largely out of the hands of government policy makers.

Responses to some of the other propositions may also be surprising to members of the AFS. For example, 67% of economists agree that "the distribution of income in the U.S. should be more equal" and 81% agree that "the redistribution of income within the U.S. is a legitimate role for government." In short, while economics is still the dismal science, it appears that all economists don't fit the "pro-growth at any cost" stereotype. AFS members should not feel dismal when considering the role of economics and mainstream economists in the realm of environmental protection and sustainable natural resource use.

- John Whitehead

Source: Fuller, Dan and Doris Geide-Stevenson, "Consensus Among Economists: Revisited," *Journal of Economic Education*, pp. 369-387, Fall 2003. Available online at [http://www.indiana.edu/~econed/issues/v34\\_4/5.htm](http://www.indiana.edu/~econed/issues/v34_4/5.htm).

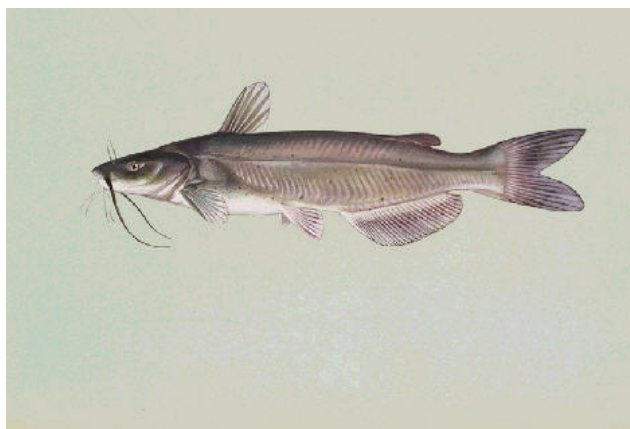
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## A. Stephen Weithman Award for Best Student Paper in the Field of Socioeconomics

### Missouri Chapter of the AFS Socioeconomics Section of the AFS

The Missouri Chapter and the Socioeconomics Section of the AFS are proud to announce the establishment of the A. Stephen Weithman Best Paper Award in Socioeconomics. These two subunits of AFS are cooperating to promote communication and interest in the field of socioeconomics by sponsoring an annual award for the best student paper in the field. The award will be presented for the best platform or poster paper presented by a student at the annual AFS meeting. Papers will be judged on content, originality, organization, contribution to the field of fisheries science, and overall presentation of the study. The award winner will be announced on the Socioeconomic Section's webpage and receive \$150 and an award certificate following the annual AFS meeting. To be considered for this award, interested applicants should complete the form available at <http://www.fisheries.org/socioecon/awards/> and deliver it to the President of the Socioeconomics Section by **July 1, 2005** (via e-mail or fax). Contact information can be found on the first page of this newsletter or on the Socioeconomic Section's webpage: [www.fisheries.org/socioecon](http://www.fisheries.org/socioecon).



--Channel catfish  
(USFWS/Duane Raver)

**135th Annual Meeting of the American Fisheries Society**  
**Anchorage, AK**  
**11-15 September 2005**

**Symposium**

1. SYMPOSIUM TITLE: Fisheries, Fishermen, and Fishing Communities: Socioeconomic Perspectives on the West Coast, Alaska, and Hawaii

2. ORGANIZER: John C. Whitehead, Department of Economics, Appalachian State University, Boone, NC 28607; phone: (828)262-6121; fax: (828)262-6105; e-mail: whiteheadjc@appstate.edu

3. DESCRIPTION: Socioeconomic analysis is needed by fisheries managers to better understand the people they are managing. The purpose of this symposium is to bring together social scientists from various disciplines, academic institutions, and government agencies. In this way, we develop an understanding of Pacific fisheries and fisheries management that is greater than the sum of its individual disciplinary and jurisdictional parts.

This symposium illustrates the importance of multidisciplinary research and understanding. Economists link with anthropologists and sociologists to better explain the behavioral patterns of fishery-related businesses and other resource user groups in response to changes in regulations and policy. Anthropologists and sociologists assess the socio-cultural and community changes that result from changes in regulations and policy.

This symposium will demonstrate the value of using social and economic concepts and analysis methods for fishery and aquatic habitat issues. Applications are to commercial and recreational fisheries in Alaska, Hawaii, and the west coast of the continental United States. The symposium begins with an investigation of the economic and social impacts of aquaculture. Next, we characterize the fishing communities from a socioeconomic perspective. We then determine the impacts of alternative commercial fishery management regimes on the commercial fishing industry, fishing communities and non-target species. We consider ethnic and labor issues in commercial fisheries. Finally, we address the economic value of marine recreational fishing.

This symposium is sponsored by the AFS Socioeconomics Section. The Socioeconomics Section provides a forum within AFS for the multidisciplinary discussion of social and economic policy and research issues related to fisheries management. This symposium will help to increase the understanding and use of social science information within the fisheries management community and build greater professional contacts between social scientists and fishery resource managers.

4. FORMAT: A full-day session with 20 speakers.

5. MODERATOR: Kevin Hunt, [kmhunt@CFR.MsState.Edu](mailto:kmhunt@CFR.MsState.Edu)

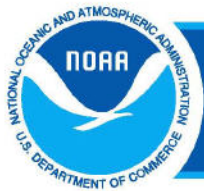
6. AUDIOVISUAL REQUIREMENTS: A standard laptop computer and LCD projectors will be sufficient. No other audiovisual equipment is needed.

7. SPECIAL SEATING REQUESTS: A standard room with no special seating is requested.

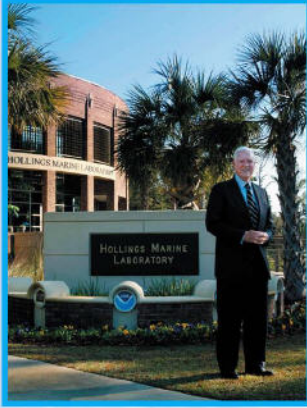
*(continued on next page)*

## 8. SPEAKERS AND TOPICS:

	<u>Name</u>	<u>Title/Topic</u>
1.	Gunnar Knapp <a href="mailto:afgpk@uaa.alaska.edu">afgpk@uaa.alaska.edu</a>	Implications of Aquaculture for Wild Fisheries: The Case of Alaska Wild Salmon
2.	Becky Clausen <a href="mailto:rclausen@darkwing.uoregon.edu">rclausen@darkwing.uoregon.edu</a>	Social Impacts of Industrialized Aquaculture to Alaska's Wild Capture Fishing Communities
3.	Mark Herrmann <a href="mailto:ffmlh@uaf.edu">ffmlh@uaf.edu</a>	U.S. Halibut Revenues, Transferable Quotas, and Halibut Farming
4.	Keith Criddle <a href="mailto:kriddle@econ.usu.edu">kriddle@econ.usu.edu</a>	A State Space Bioeconomic Model of Pacific Halibut
5.	Scott Matulich <a href="mailto:Matulich@wsu.edu">Matulich@wsu.edu</a>	The Impact of Processing Quota on the Efficiency of Crab Harvesters: The Empirical Evidence
6.	Jeff Hartman <a href="mailto:Jeff.Hartman@noaa.gov">Jeff.Hartman@noaa.gov</a>	Mandatory Economic Data Collection Program for Bering Sea and Aleutian Islands Crab Fisheries: Issues Associated with Required Submission of Industry Cost and Revenue Data
7.	Jennifer Sepez <a href="mailto:Jennifer.Sepez@noaa.gov">Jennifer.Sepez@noaa.gov</a>	Identifying, Selecting, and Profiling Fishing Communities in Alaska
8.	Karma Norman <a href="mailto:Karma.Norman@noaa.gov">Karma.Norman@noaa.gov</a>	Socioeconomic Data for Fishing Communities on the Western Front: Straddling States and Management Regions
9.	Peter Fricke <a href="mailto:Peter.Fricke@noaa.gov">Peter.Fricke@noaa.gov</a>	Old towns, new people: Transformation of commercial fishing in the Pacific Northwest
10.	Chang Seung <a href="mailto:chang.Seung@noaa.gov">chang.Seung@noaa.gov</a>	Estimating the Contribution of Fisheries to the Economies of Alaska Fishery-Dependent Communities
11.	Courtney Carothers <a href="mailto:courtney.carothers@noaa.gov">courtney.carothers@noaa.gov</a>	National Standard 8 and the Emigration of IFQ Shares from Small, Rural Fishing Communities in the Gulf of Alaska
12.	Caroline Pomeroy <a href="mailto:Cpomeroy@ucsc.edu">Cpomeroy@ucsc.edu</a>	Assessing socio-economic impacts on fishing communities: The importance of using community-level data
13.	Edward W. Glazier <a href="mailto:Eglazier@ec.rr.com">Eglazier@ec.rr.com</a>	Toward Mitigating Problems at the Fisheries-Oil Development Interface: The Case of the Salmon Drift Gillnet Fishery In Cook Inlet, Alaska
14.	Robert Halvorsen <a href="mailto:halvor@u.washington.edu">halvor@u.washington.edu</a>	Evolution of Rights-Based Management in the North Pacific
15.	Herb Holloway <a href="mailto:hholloway@wlf.louisiana.gov">hholloway@wlf.louisiana.gov</a>	Fishery Rights Auctions: A Possible Alternative to ITQs?
16.	Robert Dawson <a href="mailto:rdawson2@washcoll.edu">rdawson2@washcoll.edu</a>	Measuring Vertical Integration in Commercial Fisheries
17.	David Layton <a href="mailto:dflayton@u.washington.edu">dflayton@u.washington.edu</a>	Spatial Fishing Regulations and Steller Sea Lions
18.	David Tomberlin <a href="mailto:David.Tomberlin@noaa.gov">David.Tomberlin@noaa.gov</a>	Switching Behavior in the California Salmon-Albacore Fleet
19.	Stewart Allen <a href="mailto:Stewart.Allen@noaa.gov">Stewart.Allen@noaa.gov</a>	Yes, They Do Eat the Bait: Ethnic Differences in Fishing Practices and Attitudes Toward Management Within the Hawaii Longline Fleet
20.	Amy Gough <a href="mailto:Amy.gough@noaa.gov">Amy.gough@noaa.gov</a>	Determinants of Job Satisfaction for Filipino Crew in the Hawaii Longline Fleet
21.	Minling Pan <a href="mailto:Minling.Pan@noaa.gov">Minling.Pan@noaa.gov</a>	Want Fish or Fishing – Economic Evaluation of Fishing Tournaments in Hawaii
22.	Brad Gentner <a href="mailto:Brad.Gentner@noaa.gov">Brad.Gentner@noaa.gov</a>	NOAA Fisheries Experience Using Stated Preference Choice Experiments to Examine Angler Responses to Different Policies
23.	John Whitehead <a href="mailto:whiteheadjc@appstate.edu">whiteheadjc@appstate.edu</a>	The Economic Value of Marine Recreational Fishing on the Pacific Coast



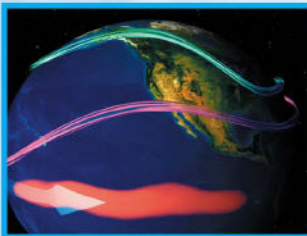
# NOAA National Oceanic and Atmospheric Administration



Former Senator Ernest F. Hollings in front of NOAA's Hollings Marine Laboratory, Charleston, SC.



NOAA's hurricane hunter airplanes for reconnaissance and research.



Scientific Modeling of the El Niño



NOAA commands a wide assortment of hydrographic survey, oceanographic research, and fisheries research vessels.

## Ernest F. Hollings Undergraduate Scholarship Program

### Program Description:

The National Oceanic and Atmospheric Administration (NOAA) Ernest F. Hollings (Hollings) scholarship program is designed 1) to increase undergraduate training in oceanic and atmospheric science, research, technology, and education and foster multidisciplinary training opportunities; 2) to increase public understanding and support for stewardship of the ocean and atmosphere and improve environmental literacy; 3) to recruit and prepare students for public service careers with NOAA and other natural resource and science agencies at the Federal, state and local levels of government; and 4) to recruit and prepare students for careers as teachers and educators in oceanic and atmospheric science and to improve scientific and environmental education in the United States.

### Up to \$28,425 available per student:

Up to \$8,000 of academic assistance per year for full-time study during the junior and senior years; a 10-week, paid (\$650/week) internship during the intervening summer; housing subsidy during the internship; round-trip travel to the internship site; and travel expenses to the Hollings scholarship program conference.

### Eligibility Requirements:

- U.S. citizenship
- Full-time junior in Fall 2005 in an accredited college or university within the United States or U.S. Territories;
- Cumulative GPA of 3.0 (based on a 4.0 scale) in all completed undergraduate courses and in the major field of study;
- Majoring in a discipline area related to oceanic and atmospheric science, research, technology, or education, and supportive of the purposes of NOAA's programs and mission, e.g., biological, life, and agricultural sciences; physical sciences; mathematics; engineering; computer and information sciences; social and behavioral sciences; and teacher education

### Application Deadline: May 23, 2005

For more information and application materials,

visit: [www.orau.gov/noaa/HollingsScholarship](http://www.orau.gov/noaa/HollingsScholarship)

or contact: ATTN: NOAA/Hollings Scholarship

Oak Ridge Institute for Science and Education

P.O. Box 117, MS 36

Oak Ridge, Tennessee 37831-0117

[HollingsScholarship@orau.gov](mailto:HollingsScholarship@orau.gov)

(865) 576-3424



## Notes and comments from the 2005 Midyear Governing Board meeting (submitted by Peter Fricke)

### Budget and policy: current

Issue: AFS needs to develop, with other professional societies, a common position to deal with perceptions of "conflict of interest". This issue is related to curbs by some Federal agencies on their scientists holding office in professional societies on the grounds that there is an inherent conflict of interest between agencies and professional sciences on interpretations of science. AFS is working on this issue, but the President (Barbara Knuth) and President-elect (Chris Kohler) would welcome input from Divisions and Sections on the matter.

Improvements in member services: AFS is completing installation of a new member services software package and will be spending \$40,000 on staff training to implement it in 2005. Members, Divisions, Sections and Chapters will be able to obtain timely information from the new system and many more statistical services will be provided.

Revenues: (a) the bulk of AFS revenues is now derived from publications and book sales; (b) the reserve fund (a fund to be capped at a sum equal to one year's budget) has reached 75 percent of its goal, a great achievement from the deficits of 1998 and 1999; (c) 18 percent of AFS revenues are from membership dues; (d) "profitability" of AFS (income over expenses) has increased by 22.4 percent in the period 2000-2005 due to management and publications streamlining, and is reflected in the growth of the reserve fund from 0 to \$1.7 million.

Publications: (a) on-line publication of journals has shrunk the waiting-time to publication from acceptance of final, edited product to 9-12 weeks depending on journal; (b) all journal text references are now cross-indexed and the abstract or original article can be viewed on-line by clicking on the reference.

Member costs: (a) AFS dues have been held constant for six years, since 1999. (b) Annual meeting fees for members have remained steady during the period. (c) Member subscription cost of AFS journals has not increased since 1999.

AFS budget for 2005 was re-approved. While there were mid-year line item adjustments, the overall budget did not change.

### Budget for 2006:

Rate increase of 6 percent for library subscription packages was requested and approved (notes: the increase covers additional on-line services to libraries, introduced in 2004 and 2005 as experimental services, and also reflects an increase in the overall number of journal pages published; commercial publisher rates for libraries have increased an average of 14 percent this year; AFS loses library subscribers at the rate of 3 or 4 percent/year as overall library budgets decline).

Reduction in student dues: the Governing Board approved a reduction of 50 percent in student membership dues to the parent society. The new dues will be \$19 per student/year and will be effective in 2006. It was noted that student memberships have a maximum term of seven years. Currently there are 1,400 student members.

Free journal access to student members: Student members will have free access to AFS on-line Journals and the Fisheries Infobase beginning with 2006 memberships.

Retired members' travel award program: Funding for this program was approved. The program will have \$3,000 per annum available to fund retired members requests for partial travel funds to enable them to participate in AFS meetings and symposia.

### President-Elect's proposed program for 2005-2006

Chris Kohler has chosen "Fisheries in Balance" as his program theme for 2005-2006

Areas of emphasis in his plan of work are (a) students and (b) strategic planning for future

Students: AFS should become a professional way of life for students, with participation in meetings, paper presentation and publication, etc, from the time of declaring a major to graduation with a professional degree.

Emphasized (a) student services, (b) student membership and participation in sections, chapters, etc. (note: Student membership could be used to bulk-up section membership by non-voting sections like SES.)

Strategic planning: Kohler is concerned that AFS plan now for future programs. He expects the reserve fund to reach its cap in 2006 or 2007, and wants to begin orderly planning of future investments in AFS. He plans to establish a working group, and invites interested people to contact him.

### Annual meeting

62 symposia planned; annual meeting in Anchorage will have full program from 8 am Monday to 6 pm Thursday.

Governing Board retreat will be all day, Friday, September 9 and the meeting will be all day on Saturday, September 10. Management and other committees will meet on Wednesday and Thursday, September 7 and 8. In-coming Board meeting will be held on Thursday morning, September 15.

Next annual meetings: 2006 -- Lake Placid, NY; 2007 -- San Francisco; 2008 -- Ottawa. 2009 meeting will be held in southeastern US; four cities have been proposed.

AFS procedures manual (for conduct of meetings and interpretation of by-laws for Governing Board, divisions, sections and chapters) has been updated and will be circulated for review shortly.

## **Midyear Report to the AFS Governing Board, March 2005**

TO: Barbara Knuth, President  
FROM: John Whitehead, President, Socioeconomics Section  
DATE: April 29, 2005

### **I. Motion Report:**

- (A) Recommended Motion:
- (B) Minority View:
- (C) Background for Motion:

### **II. Activity Report**

(A) Charge or Annual Program of Work: No specific charge or program of work defined.

(B) Summary of Outcomes and Accomplishments Organized by Focus Area in Strategic Plan with the appropriate goals, strategies, targets referenced.

### **Information Transfer and Outreach**

#### **Member Services**

Goal MS 2, Science-Based Information: The Section co-organized and sponsored a full-day symposium at the 2004 Annual Meeting: Socioeconomics and Extension: Empowering People in Fisheries

Goal MS 3, Online and Web Services: The Section maintains its own webpage ([www.fisheries.org/socioecon](http://www.fisheries.org/socioecon)) that contains all information pertaining to section activities.

#### **Aquatic Stewardship**

Goal AS 2, Stewardship Education: The Section has sponsored the "Investigation and Valuation of Fish and Mussel Kills" Workshop led by Section members Wayne Davis and Rob Southwick. The Workshop has been presented four times: 2004 Arizona/New Mexico Chapter Meeting, 2004 Annual AFS Meeting, 2005 Oklahoma Chapter Meeting, and 2005 Nebraska Chapter Meeting

### **(C) Recommendations or Suggestions for Future Consideration:**

**III. Financial Status (provided only to Society Financial Officer and will not be copied and distributed in the briefing book)**  
To be provided by Secretary-Treasurer Peter Fricke.

# CREATING A FISHERIES MOSAIC

AFS WESTERN DIVISION & ALASKA CHAPTER ANNUAL MEETINGS



23<sup>RD</sup> LOWELL WAKEFIELD SYMPOSIUM ON PACIFIC ROCKFISHES

## AMERICAN FISHERIES SOCIETY

135<sup>TH</sup> ANNUAL MEETING · SEPTEMBER 11-15, 2005  
ANCHORAGE, ALASKA