

SECTION 1

Meet an Economist

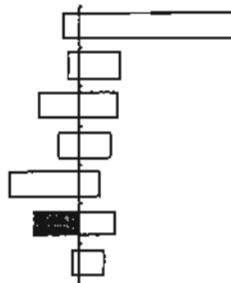
by Russell Hunt

FOCUS

How does an economist examine a natural resource?

Many people are interested in a natural resource like the fishery. Biologists might focus their study on the life cycle of the fish. Geographers might be more interested in the spatial interaction which goes on around the fishery. What special interest in the fishery might economists have?

Beverley Cook is an economist working at the University of New Brunswick. In this brief profile she describes how she, as an economist, conducts research into New Brunswick's salmon resource.



The first impression of Beverley Cook's small office in Carleton Hall at the University of New Brunswick is of the amount of paper it contains. Her desk is covered with current projects. There are stapled copies of articles from academic journals open to pages of graphs; there are books, and pads of lined paper covered with handwritten outlines and notes. Prominent is a sheaf of computer printout. This is part of the study she is involved in, a study on the economics of the New Brunswick salmon fishery.

One basic piece of information Beverley Cook wanted to learn was the value of salmon caught by the commercial fishery in the province's waters. To make that calculation should be easy. It would involve figuring out how many kilograms of salmon were caught, and then multiplying that number by the average price paid by buyers of salmon. Beverley Cook also wanted to know how many people worked at commercial salmon fishing and how much time they devoted to it, so she could calculate their earnings.

Getting reliable information, however, was a problem. Beverley Cook explains: "There is no easy source of data, so we have to set up a lot of individual interviews. Also we need to design the interviews so

that they will provide the proper information, and then hire people to conduct them.

"When we put all that data together, we can come up with some idea of the value of the salmon to the commercial fishery."

But the commercial fishery is not the only group interested in New Brunswick's salmon. There are also anglers, and for them salmon fishing is recreation, not work.

"If you want to see the salmon resource used in the way that creates the most work for people," says Beverley Cook, "your first idea might be to prohibit recreational fishing,

NEW BRUNSWICK COMMERCIAL SALMON CATCH		
YEAR	WEIGHT (kg)	VALUE (\$)
1971	125 645	259 060
1980	66 235	358 331
1981	110 000	634 700
1982	87 000	586 380
1983	86 591	578 428
1984	14 219	94 700

NOTE: The licensed commercial salmon fishery was banned from 1972 to 1979 and from 1985 to 1987.

Figure 2-2 N.B. commercial salmon catch

and allocate all the fish to the commercial fishery.

"But it isn't that simple. Recreational salmon fishing also creates jobs for people. Salmon anglers buy equipment, and that generates paid work for people who sell it. They often leave home to do their fishing. That creates jobs in motels and restaurants. Some anglers employ guides. So the salmon which recreational anglers can catch generate jobs too, indirectly. That means the salmon caught this way also have economic value."

What is the benefit of research like Beverley Cook's salmon study? Governments are often faced with difficult decisions, such as

the question of how to regulate the salmon fishery. From Greenland to the Maritimes, there is tremendous competition for this resource. Partly because of environmental conditions and partly because of over-fishing, salmon stocks in New Brunswick and elsewhere have been depleted. Biologists can predict how many salmon can safely be caught if the stock is to survive. But who should be allowed to catch the salmon? How should it be shared between commercial and recreational fishery?

From studies like Beverley Cook's, it is possible to estimate the effects of permitting the entire allowable catch to be taken by the commercial fishery. "We could project how

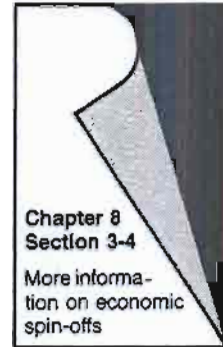


Figure 2-3 Recreational and commercial salmon fishing locations

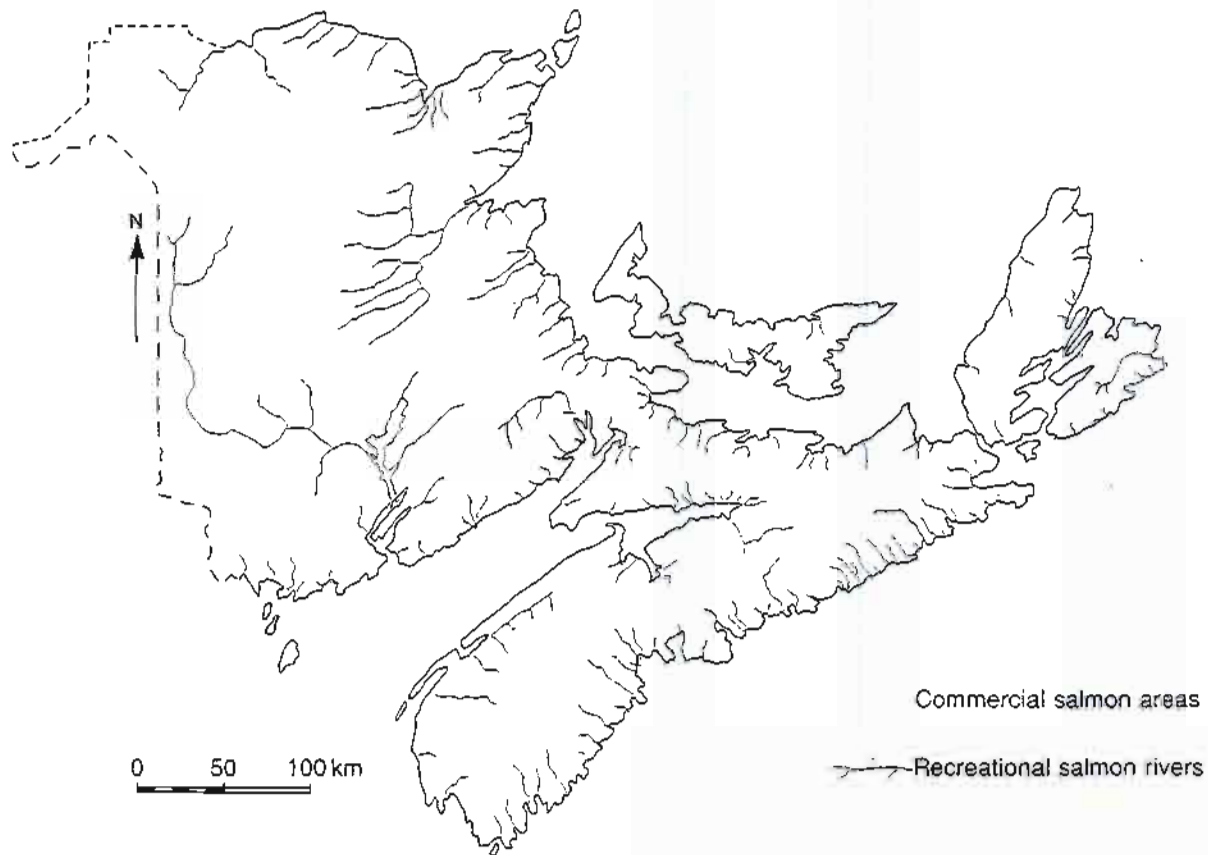
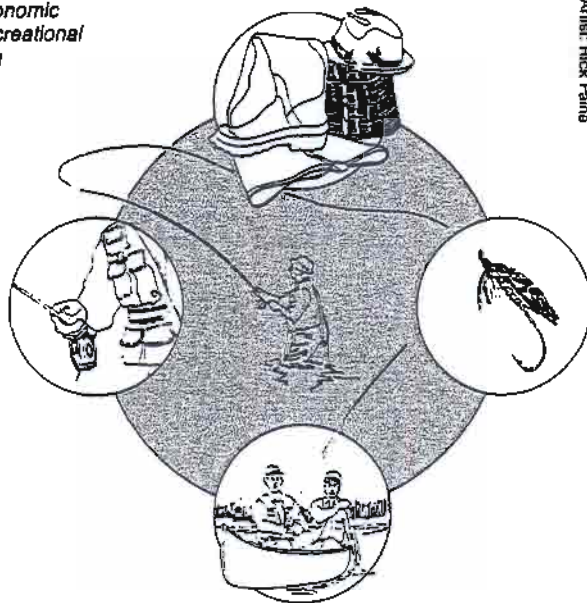


Figure 2-4 Economic spin-offs of recreational salmon fishing



Artist: Rick Payne

recreational anglers. "We can estimate how many people would be involved, how much time they would spend fishing, how much money they would spend doing so, and what the impact of that spending would be in the province," Beverley points out.

Does this mean that by comparing the economic value of salmon caught in different ways economists can make the final decision on who should use the resource?

"Not really," says Beverley. "We can show how many jobs and how much income would be generated by the two competing user groups. We can calculate what would probably happen if the salmon were divided 50:50 between the two groups. But the final decision isn't one for economists. It's a political decision, one for governments to make. What we can do as economists is help with information that shows what the economic impact of the different possible choices would be."

What does Beverley Cook like about her work as an economist? "I like the feeling that what I do as an economist might make a difference," she says, "that my research might influence decisions that will make the economy work better."

much work this would generate for how many fishermen, and how much it would add to their annual incomes," says Beverley.

It is also possible to estimate the effects of allowing all the salmon to be caught by

Looking Back

When Beverley Cook talks about economic value, what factors does she include in her definition?

Reaching Out

Beverley Cook describes the jobs which the recreational salmon fishery creates both directly in the industry and indirectly in the community. The commercial salmon fishery also creates both direct and indirect or spin-off jobs. What indirect employment would the commercial salmon fishery create?