

In Honour of Dr. Colin Clark: Developments and Challenges in Fisheries Economics



May 15 and 16, 2012

Michael Smith Laboratories, Room 102

University of British Columbia

2185 East Mall

Vancouver, BC V6T 1Z4

*Conference hosted by the University of British Columbia Fisheries Centre and the
Departments of Mathematics and Economics
in celebration of Dr. Clark's 80th Birthday*

How a mathematician rocked the boat for fisheries economists

Dr. Colin Clark's involvement in fisheries economics began in 1970, while on sabbatical from his position as Professor of Mathematics at the University of British Columbia. He was amazed to discover how important the field of economics was to resource management at the time, and yet, his review of the literature revealed flaws in the underlying mathematics.

A book by Canadian entomologist Kenneth Watt, *Ecology and Resource Management*, first caught Dr. Clark's attention. Watt had introduced the standard Ricker model into his text, with a footnote that read: "Of course, this model has no economic component."

Dr. Clark took up the challenge and turned his attention from mathematics to British Columbia's pressing issues at the time: forest and fisheries management.

"Some of my colleagues thought I was a bit off the wall," he chuckles. "Model building was really unusual. Unlike many mathematicians, I made my own models."

After attending a graduate course in the economics department in 1971, Dr. Clark began working with Dr. Gordon Munro, who proved a major influence on his career and research.

His first breakthrough in the field came in 1973, when he published an article for *Science*.

"It made quite a splash," Dr. Clark recalls. "Doing the math correctly helped to explain why the whalers were more interested in short-term profit than long-term sustainability."

Opportunity drew Dr. Clark deeper into fisheries economics. Forestry economists were not yet ready to consider radical, new ideas like long time horizons. Dr. Clark recalls one particular presentation to a group of B.C. forestry company executives in 1975.

"I explained the problems with long-term sustainability and forest economics," he says. "After my talk was over, the convenor of the meeting was delighted to inform me that they, too, were concerned with long-term forest management. So I asked what time horizon they were considering."

The reply? "5 years, and we are even talking about 10 years!" the convenor declared.

"They were not even operating in the same realm of discussions," explains Dr. Clark.

Throughout his career, Dr. Clark shaped the field of fisheries economics with his contributions to dynamic modelling of fishing behaviour and harvesting rights.

Now on the eve of his 80th birthday, Dr. Clark continues to dabble in mathematics "for fun", as a Professor Emeritus at the University of British Columbia, and is learning the Theory of Numbers.

Agenda: Day 1 – Tuesday, May 15, 2012

Contributions of Dr. Clark to fisheries economics and future directions

Moderated by Dr. Rashid Sumaila

Time	Speaker	Topic
8:30 - 9:00	<i>Coffee and snacks</i>	
9:00 - 9:05	Dr. Rashid Sumaila, <i>University of British Columbia</i>	Welcome
9:05 - 9:15	Dr. Simon Peacock, Dean of Science, <i>University of British Columbia</i>	Introduction
9:15 - 9:55	Dr. Gordon Munro, <i>University of British Columbia</i>	Keynote: Contributions of Dr. Colin Clark to the field of fisheries economics – Past influences and future directions
10:00 - 10:30	Dr. John Boyce, <i>University of Calgary</i>	Presentation: Theoretical models of regulatory choice
10:30 - 10:45	<i>Coffee break</i>	
10:45 - 11:10	Dr. Jim Wilen, <i>University of California Davis</i>	Presentation: Optimal control of bioinvasions
11:15 - 11:40	Dr. Louise Teh, <i>University of British Columbia</i>	Presentation: Discount rates in small-scale fisheries
11:40 - 12:00	Dr. Rashid Sumaila	Summary of the morning
12:00 - 13:30	<i>Lunch</i>	
13:30 - 13:55	Dr. Daniel Gordon, <i>University of Calgary</i>	Presentation: Future econometric issues in fisheries economics
14:00 – 15:40	Dr. Jim Wilen Dr. Werner Antweiler, <i>University of British Columbia</i> Dr. Dirk Zeller, <i>University of British Columbia</i> Wilf Swartz, <i>University of British Columbia</i>	Panel discussion: What are the current deficiencies with fisheries economic data and the impact on policy analysis? How do we go about correcting the data problem and getting the econometrics right in fisheries economics?
15:40 - 15:50	Dr. Daniel Gordon	Panel summary
15:50 - 16:00	Dr. Rashid Sumaila	Highlights of the day and closing
19:00 - 21:00	<i>Dinner and presentation at Sage Bistro</i>	
20:30 - 21:00	Surprise guest speaker	Our lips are sealed... We wouldn't want to ruin the surprise!

Agenda: Day 2 – Wednesday, May 16, 2012

Interdisciplinary issues in resource management

Moderated by Dr. Gordon Munro

Time	Speaker	Topic
8:30 - 9:00	<i>Coffee and snacks</i>	
9:00 - 9:05	Dr. Gordon Munro	Welcome back, recap of Day 1
9:05 - 9:15	Dr. Michael Bennett, Head of Mathematics, <i>University of British Columbia</i>	Introduction
9:15 - 9:55	Dr. Marc Mangel, <i>University of California</i>	Keynote: Behavioral bioeconomics, with application to fisheries
10:00 - 10:30	Dr. Carol McAusland, <i>University of British Columbia</i>	Presentation: Globalization and public goods
10:30 - 10:45	<i>Coffee break</i>	
10:45 - 11:10	Dr. Bob McKelvey, <i>University of Montana</i>	Presentation: Restoration of a distressed transboundary fishery subject to climate change – A stochastic dynamic investment game
11:15 - 11:40	Dr. Rick Barichello, <i>University of British Columbia</i>	Presentation: Trade and management policy issues
11:40 - 12:00	Dr. Gordon Munro	Summary of the morning
12:00 - 13:30	<i>Lunch</i>	
13:30 - 13:55	Dr. Jin Yoshimura, <i>Shizuoka University</i>	Presentation: Conflicts between resource economics, capitalism, and investment economy
14:00 - 15:40	Dr. Bob McKelvey Dr. Harry Nelson, <i>University of British Columbia</i> Dr. Rick Barichello, <i>University of British Columbia</i> Andrés Cisneros Montemayor, <i>University of British Columbia</i>	Panel discussion: The profit bases of the three types of economic systems. Destructive interactions between resource economics, capitalism, and investment economy.
15:40 - 15:50	Dr. Jin Yoshimura	Panel summary
15:50 - 16:00	Dr. Gordon Munro	Highlights of the day and closing

Location: Michael Smith Laboratories



Location: Sage Bistro

