Role Play: Gone Fishin'?

The following article presents a decision-making exercise involving role playing. Students explore the interdependence of our economy and our ecology, as exemplified by the case of the New England fishing industry. Plans are underway to publish an expanded version of the exercise, incorporating a greater number of roles and issues as well as historical information. Thus teachers who use the role play are encouraged to send their reactions to The Ledger's editor. (See "Fed Update" for address.)

BACKGROUND: THE 200-MILE LIMIT LAW

Until recently, fish had traditionally been considered a common property resource; like outer space, the fish in the oceans belonged to everyone rather than to a particular individual or nation. In 1976, however, Congress passed the Fisheries Management and Conservation Act, which heavily limits foreign fishing in a coastal zone extending 200 miles off the shores of the U.S. Previously, U.S. fishermen had faced stiff competition from foreign fishing fleets. In 1972, for example, New England fishermen took only one-sixth of the total catch of fish from the Northwest Atlantic; the remainder went to fishermen of the Soviet Union, Japan, Canada and other nations.

In addition to restricting foreign fishing, the 200-mile limit law established a system of regional fishery management. The Department of Commerce is responsible for fishery conservation and is advised by eight citizen councils, representing regions around the country such as New England and the North Pacific states.

Each council is charged with developing a "fishery management plan" for its coastal region. This plan outlines how the council will regulate local fishing so as to conserve fish resources and to serve best the economic, recreational and consumer needs of the region. The council is authorized to use various regulatory tools, such as: setting quotas on the number of fish caught, limiting the number of people allowed to fish, closing certain areas or seasons to fishing and restricting types of gear and boat size.

Further, all groups which use or have an interest in fish resources must be included in policy decision-making. The local citizens appointed as council members must represent a balance of the various interested groups, like the commercial fishing industry, recreational fishermen, seafood consumers and environmental organizations. In addition, the council must hold a public hearing when considering a policy decision so that all concerned have an opportunity to express their views. At the end of each of the four annual fishing seasons, the council must review its plan and consider necessary amendments.

SCENARIO

The New England council set quotas on the catch of cod, haddock and flounder for the 1977 spring fishing season. The local fishing industry depends heavily on these species — known as groundfish — which are very popular with seafood consumers. As a result, groundfish stocks have been depleted over the years.

It is now three weeks into the spring season, and the groundfish quotas have already been filled.
The council just closed all fishing of these species until the next season and is now deciding how to regulate the groundfish catch during the season ahead. A public hearing will be held tonight; the four council members and the seven characters attending to voice their opinions are described below. The council will reconvene after the hearing to achieve consensus regarding next season’s groundfish regulation.

**DIRECTIONS**

- Allow two to three class periods for the entire exercise.
- Assign roles after students have had an opportunity to read the article.
- The statements of role give background information about each character; it is left to the student to develop a specific position on groundfish regulation that is in keeping with his or her role. In doing so, students should use their imaginations as well as consider the various regulatory tools, such as quotas, described in the background information.
- When students understand their roles, start the public hearing, which should last 30 to 45 minutes.
- Have the council reconvene to reach a decision by consensus during the first half of the class period following the hearing. During the remainder of the period, students should participate in a debriefing discussion along the lines of the follow-up questions suggested below.

**ROLES**

- **Benjamin Gonsalves:** A commercial fisherman for the past 20 years, you were delighted when the 200-mile limit was passed. Thinking that hard times were finally over, you borrowed money to buy a large modern fishing boat, which you’d long dreamed of owning. The spring fishing season has turned out to be a financial disaster for you, however, thanks to the council’s quota system. You don’t know how you are going to meet your business’s needs for the spring. They feel that those who fish for sport should be able to do so throughout the coming season. Thus you propose . . .

- **John Parisi:** The president of an environmental protection organization, you believe firmly in our responsibility to conserve natural resources for future generations. Nonetheless, you are also sensitive to the needs of those employed in the fishing industry. The problem, in your opinion, is that the fleet depends too much on groundfish. There are some 200 other species—such as whiting, squid and pollock—which still exist in volume since they have not been traditional favorites with seafood consumers. You propose . . .

- **Mark Brown:** You dropped out of college five years ago because the freedom of a fisherman’s life appealed to you. You think that the independent character of the fisherman is as much a scarce national resource as the fish themselves. Not only does the quota system threaten to destroy this freedom, it is also completely unnecessary. Now that the foreign ships have pulled out, stocks of cod and haddock are at the highest levels ever for the past 15 years. Thus you propose . . .

- **Maria Taylor:** A marine scientist, you are employed by the government to advise the council on the status of depleted species. You disagree with fishermen who argue that groundfish are now so abundant that quotas are unnecessary. Your data indicates groundfish may eventually become extinct unless part of the present supply is conserved. You recommend not only that the quotas be continued, but also that . . .

- **Theresa Gomez:** You own one of the largest fish processing companies in New England. Although your business has suffered along with the fishermen’s this spring, you support rather than oppose conservation. You recognize that conserving fish may have short-term costs, but in the long run the entire fishing industry will benefit if fish stocks are allowed to replenish themselves. You have long thought that the industry should diversify and expand into new markets, so you propose . . .

- **Joanne Stein:** You have been asked to attend the hearing by the sporting club of which you are president. Club members have no complaint against conservation, in general, but they did resent the closing of cod and haddock fishing midway into the season this spring. They feel that those who fish for sport should be able to do so throughout the coming season. Thus you propose . . .

- **Sally Marsh:** You attend the hearing because you are concerned about the high prices of cod, haddock and flounder, all of which are great favorites of yours. For health reasons, you prefer fish to meat as a source of protein. You feel that the consumer suffers from the quota system by paying a higher price for the artificially limited supply of fish. You think that an attempt should be made to keep prices reasonable by increasing the available supply, so you propose . . .

- **Alice Rogers, Council Chairperson:** It is your responsibility to ensure that the hearing runs smoothly, and that all have an equal opportunity to express their views. You believe strongly in the need for conservation, but you also want to develop regulations that protect the interests of all concerned. You listen carefully to the variety of opinions voiced so as to devise a plan which balances the need for conservation with the economic, recreational and consumer needs of the community.

- **Mark Hanson, Council Member:** You are the publisher of the magazine, Ocean Sport. You consider that your major goal as a council member is to support the needs of the recreational fisherman. You are also concerned, however, with protecting the interests of the seafood consumer.

- **Manuel Motta, Council Member:** The president of a fishermen’s cooperative association, you are concerned about the needs of the commercial fishermen. Since you recognize that conservation of groundfish stocks is in the best long-term interest of the fisher-
men, you are not totally against restrictions. You also feel, however, that fishermen deserve some kind of assistance—perhaps a government subsidy—if these restrictions cause them immediate hardship.

**John Hubbard, Council Member:** Last year you retired after a 25-year career as a state conservation officer. Although your main objective as a council member is to ensure the protection of depleted species, you are not convinced that the quota system is the best way to do so. Therefore you listen closely to and question carefully those who propose alternative methods. You would like to see the council adopt a blend of the various conservation methods.

**FOLLOW-UP QUESTIONS**

- What issues were raised in the public hearing? Which seemed to you to be most important? Least important? Why?
- The council is responsible not only for fishery conservation but also for the welfare of the community. How well did the council's decision reflect a balance of the needs expressed by those who attended the hearing?
- What are the long- and short-term costs of the council's decision? What are the long- and short-term benefits? Who pays the costs, and who receives the benefits? Do the short-term benefits outweigh the short-term costs? What about in the long-run?
- Did you agree with the council's decision? If not, what do you think would be a better solution to the groundfish problem?
- In your opinion, is government regulation necessary to ensure wise management of scarce, renewable resources such as groundfish? Who benefits from such regulation, and who pays the cost? Do those who pay the cost deserve compensation from the government? Who should make decisions about government regulations?

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**Innovative Classroom: The New England Aquarium**

In addition, the Aquarium's trained, volunteer field associates make classroom visits throughout the Greater Boston area either to prepare students for a scheduled Aquarium visit or simply to offer an educational program. Programs usually feature a live aquatic animal such as a beaver, an otter, a crab or a sea star as well as an audiovisual presentation. The field associates are available to make follow-up visits or to assist with field trips to local aquatic habitats.

High school students interested in exploring career opportunities in marine sciences and oceanography may join Explorer Post 629, which sponsors monthly meetings and occasional field trips. Those students aged 16 and over may receive training and course credit by enrolling in the Aquarium's volunteer program.

A class trip to the Aquarium combines fun and learning. The Education Department recommends choosing a general theme, such as aquatic locomotion or protective coloration, around which the visit can be organized and related to the in-school curriculum. The Education Department provides resource materials suggesting possible topics and related questions to guide students' observations in the Aquarium and follow-up discussion in the classroom.

The multi-media educational programs presented in the Aquarium are designed to meet the particular needs of each visiting group and may concern either aquatic life or environments. Especially popular are the performances given aboard the Discovery, a floating amphitheater. These shows highlight the intelligence and adaptive ability of dolphins and sea lions. Staff and volunteers also give gallery talks to enhance students' understanding of the exhibits and to reinforce the information given in the educational programs. Special films are shown every afternoon.

For more information on any of the above programs and services, several of which involve a fee, write: Education Department, New England Aquarium, Central Wharf, Boston, MA 02110 or call: (617) 742-8830.

If distance prohibits your taking advantage of the Aquarium, consider organizing a local field trip. Classroom units on marine ecology can be substantially enriched by a visit to one of the freshwater ponds, salt marshes, swamps, bogs and beaches which abound in New England. If your class is more interested in investigating the economic aspects of New England's marine resources, visit a local fish pier, market or processing plant.
New England Update

CONNECTICUT

The Connecticut Joint Council on Economic Education announces three fall courses, as follows: a course on the American economic and business system will begin on September 21 at the Groton campus of the University of Connecticut; a course on identifying economic survival skills will begin on September 27 at the Amity Regional High School; and a two-weekend workshop on economic survival skills, co-sponsored by the State Department of Education, will begin on September 29 at the Storrs campus of the University of Connecticut.

The Council will hold its 25th annual meeting on October 20 in New Haven. For further information, call Edward Hamblin at (203) 486-2327.

MAINE

During October 1978, the Maine Council on Economic Education will co-sponsor with the State Department of Education two workshops on “Trade-offs,” an economic education series to be televised during the coming year. Participants will later lead more workshops on the same theme, to be offered throughout the state during January. The Council also hopes to establish during 1978-1979 three regional economic education centers providing materials and training to teachers. For further information, call Robert Mitchell at (207) 581-7067.

MASSACHUSETTS

The Economic Education Center at Northeastern Massachusetts University will conduct two inservice courses this fall at the Hanover/Hingham Public Schools and the Fall River Public Schools. The Center is currently seeking part-time economics teachers for these courses. Contact Richard Ward at (617) 997-9321 for more information.

This fall, the Stonehill College Center for Economic Education will sponsor two inservice courses for secondary school teachers; call Timothy M. Sullivan at (617) 238-1081 for more information.

NEW HAMPSHIRE

At its annual meeting this past June, the Board of the New Hampshire Council on Economic Education elected Robert Mixer, vice president of the Concord National Bank, as the new chairman.

The Council’s program chairman, Carter Hart, conducted a workshop this summer to train a cadre of teachers in the use of “Trade-offs.” During the fall, these teachers will train others at locations throughout the state. Call Mr. Hart at (603) 271-3609 for further information.

RHODE ISLAND

The Rhode Island Council announces the appointment of Judith Brenneke as the new director of the Center for Economic Education at Rhode Island College. Previously the associate director of the Illinois Council on Economic Education, Dr. Brenneke will teach four inservice courses this fall and will train teachers in the use of “Trade-offs.” For further information, contact her at (401) 456-8037.

VERMONT

During the fall, Vermont educational television will broadcast the series of economic educational units produced by Econ Trek, the Vermont Economic Education Project. This year’s series includes two new films: “Men of Stone” and “You Can’t Get There From Here,” studies of Vermont’s granite and transportation industries. For more information, call Malcolm Severance at (802) 656-4017.

For information about fall workshops not yet announced, contact your local council or center.

Fed Update

- As of this issue, The Ledger has a new editor: Nina Gillman. Previously a consultant with the Massachusetts Department of Education, Ms. Gillman joined the staff of the Fed’s Public Services Department in June 1978. A new column, “Letters to the Editor,” will appear in forthcoming issues; feedback on past issues and suggestions for future topics will be warmly welcomed. Write: Nina Gillman, Public Services, Federal Reserve Bank of Boston, Boston, MA 02106 or call: (617) 973-3452.

- The Fed—Our Central Bank, a new 16 mm color film produced by Francis Thompson, Inc., provides an overview of the structure, goals and operations of the Federal Reserve System. The central theme of the 18-minute film is how the value of money is determined and maintained. The movie emphasizes the impact of our nation’s central bank on the individual citizen by interweaving the general discussion on the Fed with the story of a Vermont craftsman who wishes to expand his business. The film is appropriate for high school students. To borrow it free of charge, write: Bank and Public Information Center, Federal Reserve Bank of Boston, Boston, MA 02106 or call: (617) 973-3459.