

MSC Certification

Lobbying for lobsters

This is a partial pre-assessment report of the Prainha do Canto Verde Community-based lobster fishery in Brazil

The Marine Stewardship Council (MSC) is a non-profit organization dedicated to the long-term protection or “sustainability” of marine fisheries and related habitats. First started as a joint initiative between Unilever and the World Wide Fund for Nature (WWF), the MSC is now a fully independent organization that is governed by an independent Board of Directors advised by a panel of scientific, economic, and fishery experts.

The MSC Mission Statement is:

To work for sustainable marine fisheries by promoting responsible, environmentally appropriate, socially beneficial, and economically viable fisheries practices, while maintaining the biodiversity, productivity and ecological processes of the marine environment.

Dedicated to promoting “well-managed” or “sustainable” fisheries, the MSC initiative intends to identify such fisheries through means of independent third-party assessments and certification.

Once certified, fisheries will be awarded the opportunity to utilize an MSC promoted eco-label to gain economic advantages in the marketplace. Through certification and eco-labelling, the MSC intends to promote and encourage better management of world fisheries, many of which have been suggested to suffer from poor management. In September 1996, the MSC gathered together a group of more than 20 preeminent persons experienced in fisheries and fisheries-related issues (scientists, social scientists, economists, lawyers, etc.) to discuss the establishment of guidelines for defining “sustainable” fisheries. Pulling from large volumes of work by a number of leading organizations (FAO, Greenpeace, WWF, ICES, etc.), as well as their cumulative

experience and expertise, the group was able to develop a document entitled “Draft Principles and Criteria for Sustainable Fishing”. These principles and criteria, which are now approved for final use by the MSC Board of Directors, form the basis for qualifying fisheries as certified and able to utilize the MSC ecolabel.

At the request of Julia Novy, Director of the Community Based Conservation Program for World Wildlife Fund and Rene Sharer of Instituto Terramar, Scientific Certification Systems, Inc. undertook a Pre-assessment of a small community-based lobster fishery in Prainha do Canto Verde in Northern Brazil to determine if this fishery is a good candidate for MSC certification. More specifically, this pre-assessment project was divided into two parts:

Part 1: Collect and assess general information about the fishery and the status of lobster stocks in Brazil. If information is found that strongly suggests that the fishery under evaluation could not meet the MSC certification requirements, the project would not move on to Part 2.

Part 2: Complete the data collection and interviewing of relevant managers, scientists and stakeholders in the fishery to provide information on the following issues:

- The fishery management policy objectives, regulations, and practices;
- State of preparedness for assessment, in particular, the extent to which the fisheries systems are based upon the MSC principles and criteria;

- List of stakeholders in the fishery;
- A short description of the fishery;
- General historical background information on the fishery and area;
- Identification of other fisheries in vicinity, but not subject to certification;
- A decision as to whether it will be possible to move from the pre-assessment to final assessment stage;
- A discussion of the key issues and factors identified as potentially troublesome in completing a successful certification assessment based on the MSC principles and criteria, and;
- A budget estimate for conducting a full certification assessment.

The following report details the work completed for Part 1 of this project, noting that the project was terminated after the completion of Part 1 due to the information obtained on the status of lobster stocks in Brazil. Part 2 of this project was therefore not completed.

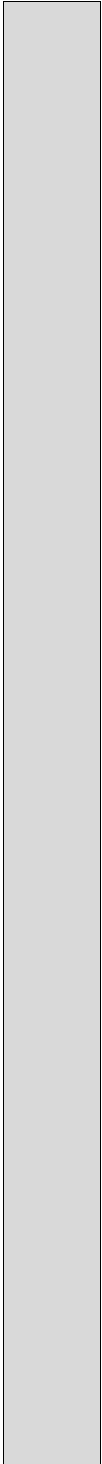
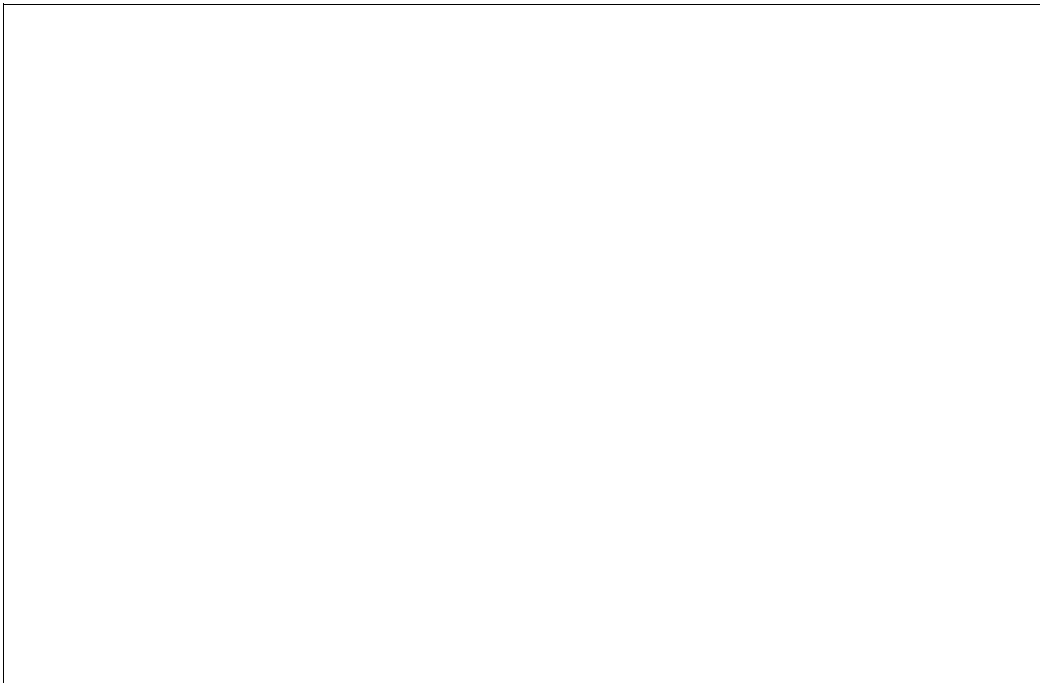
Scientific Certification Systems (SCS), founded in 1984, has developed a series of

programs to independently evaluate and certify environmental and food safety performance. The company's mission is to provide objective, scientific information to industry, government policy makers, and consumers about the environmental and health consequences of various industrial and agricultural practices, and to encourage voluntary, responsible improvements through recognition of outstanding industry achievement.

SCS consists of a multi-disciplinary team of scientists, trained in the fields of chemistry, chemical engineering, process engineering, packaging engineering, biology, statistics, entomology, geology, nutrition, agricultural sciences, marine sciences, and forestry.

Chet Chaffee directed this pre-assessment. Chaffee has over 15 years experience in the field of marine sciences, and more than 10 years of experience in environmental certification and eco-labelling. Chaffee has conducted or participated in certification projects for both small and large (Fortune 50) companies in a wide variety of industries from chemical manufacturing to food to resource extraction.

Bruce Phillips has more than 30 years experience in fisheries research and management from both a practical standpoint, having worked at



Commonwealth Scientific and Industrial Research Organization (CSIRO) and, academically, as a professor at Curtin University.

Phillips is internationally recognized as one of the leading authorities on lobster biology and lobster fishery management having worked as a consultant and research scientist to lobster fisheries in Australia, New Zealand, Brazil, Mexico, Cuba, and several Asian fisheries. Most recently, Phillips has been working as the editor for a compendium of papers on lobster fisheries and their management around the world.

The community of Prainha do Canto Verde (PCV) comprises a small number of fishers that use traps to catch lobster. The community, through the livelihood of the fishers, is dependent on lobster through both subsistence and commercial fishing.

This project was undertaken as an MSC-compliant pre-assessment of that part of the Brazilian lobster fishery fished by the fishers at PCV. This means that the scope of the project is to look at how the fishers in PCV manage and fish for lobster in an area defined geographically by the ability of the fishers to sail their *jangadas* (indigenous sailboats) to fishing locations.

The project is not concerned with other fishers or other management activities except where these activities may impinge

on or significantly effect the management and fishing of lobster by the community at PCV.

In essence, to examine if this community of fishers is managing and fishing a sustainable fishery as defined by the Principles and Criteria of the MSC, one must look at three things:

1. The health of the stock being fished by PCV fishers
2. The ecological/environmental impacts of fishing lobster in the areas fished by PCV fishers, and
3. The robustness of the system in place to manage the lobster fishery fished by the fishers of PCV.

In terms of community-based fisheries, this means looking at the following:

1. Stock Status: Even though a community such as PCV may be fishing a small portion of a large stock that is being fished by many others, the sustainability of that fishery is dependent on the entire stock being in healthy condition.

If the stock is not healthy, then it may become quite problematic to catch lobster in PCV or any other area in Brazil. As a result, the pre-assessment must look at the health of the entire lobster stock throughout its geographic distribution.

2. **Ecological Impacts:** It was determined by the MSC Standards Council that it is part of the MSC process to look at ecological impacts anywhere in the fishery where the impacts could either be tied directly to activities of the fishers applying for certification, or of such magnitude that the impacts from other areas not fished by the applicants could have detrimental effects on that part of the fishery under consideration.

3. **Management System:** In the case of a community fishery, it is incumbent upon the certification body conducting the pre-assessment to determine if there are multiple management systems at work in the fishery. In the case of PCV this is certainly the case. The PCV community has its own management system for structuring the fishing effort, protecting the resource, and minimizing effects on the local environments. At the same time, the federal government has a management system in place that provides some regulatory controls and is responsible for the effort applied throughout the lobster fishery along the entire coast of Brazil.

At the beginning of this project, there were some suspicions that there may be problems with the health of the lobster stock or stocks in Brazil. If this could be shown to be true, it would be difficult to see how the lobster fishery in Prainha do Canto Verde or any other part of Brazil could be considered sustainable under the MSC program. As a result, WWF asked for this project to be separated into two parts:

Phase 1 Examination of the health of the stocks in Brazil and in the areas fished by fishers from Prainha do Canto Verde.

Phase 2 - If the stock or stocks of lobster being fished in Brazil can be shown to be healthy, then the remainder of the pre-assessment examination of the ecological impacts of fishing and the robustness of the management system could be undertaken.

If evidence became available that the stock(s) is in poor condition and that the fishery would not be able to be certified under the MSC program, then the project would be terminated to avoid further expenses to WWF.

Two main species of lobster occur in the catches of Brazil; *Panulirus argus* and *P. laeviscauda*. *P. argus* is the predominant lobster caught in Brazil and makes up the larger part of the catch in the PCV fishery.

Early discussions with fishery scientists, fishery managers, and others in Brazil provided excellent evidence that the lobster stocks in Brazil in general are in serious decline. In and of itself, this may not have been sufficient for the project to be terminated if there were some indication that the stock being fished by the fishers of Prainha do Canto Verde was a separate and identifiable stock from other lobster stocks in Brazil. However, after considerable discussions again with fishery scientists and managers in Brazil it became clear that there is no reliable or reasonable evidence to suggest that separate lobster stocks exist along the coast of Brazil. There is some anecdotal evidence that there may be some geographic or hydrologic barriers between areas that could facilitate the separation of breeding units and, therefore, stocks (Fonteles-Filho, 2000), but to date there is no scientific support for this. All the scientists interviewed in Brazil and the literature reviewed suggest that there is a single stock of both *Panulirus argus* and *Panulirus laeviscauda* and the Brazilian government manages the lobster fishery as one management unit.

Landings of lobster in Brazil were once considered to be the world's second largest catch of warm-water species. Landings showed an upward trend from 1965-1979, but from 1979 to present there has been a gradual decline with a few production peaks as in 1982, 1984, 1990, 1991, 1995, 1996.

The decline in the total annual catch is only one indication that the lobster fishery is in trouble. The catch per unit effort or CPUE has also declined from 0.936 and 0.410 kg/trap-day in 1965 to 0.097 and 0.019 kg/trap-day in 1997 for *P. argus* and *P. laeviscauda* respectively.

Increased effort

To try and bolster the economic aspects of the fishery and maintain annual catches, the effort in the fishery has increased considerably over the years. Effort has increased by expanding the number of

boats in the fishery and by increasing the geographic boundaries of the fishery. In addition, the types of boats and gear in the fishery have changed so that there are now many more industrial fishers with large motor craft in the fishery that are able to expend a good deal more effort than the traditional indigenous fishers using local sail craft (*jangadas*).

The distribution of effort in the fishery at present shows that the number of boats is near equally distributed between sail craft and motor craft, but the effort is skewed such that more than 90 per cent of the effort is produced by the motorized fleet, and less than 10 per cent of the effort produced by the traditional sail fleet.

There may be many reasons for the decline in the catch of lobster in Brazil from changes in the biological and oceanographic regimes to fishery management. However, due to the fact that there is such agreement that the decline is real and is continuing, this pre-assessment project was terminated as there would be no way the fishery would be able to meet the MSC requirements for certification. Further effort was not expended to determine the causes of the decline.

One thing appears to be clear, the management of the fishery in Brazil does not appear to be making the necessary effort to change its management practices to stop the decline in the lobster fishery and rebuild the stocks. This appears to be a serious problem that is putting the PCV lobster fishers, other fishers, and the local ecology and fishery at risk through no fault of their own.

Although Phase 2 of the project was discontinued, Chet Chaffee upon his visit to Brazil was able to talk with the fishers in PCV to see what measures, if any, were being taken on a local level that might have been useful in an effort to obtain MSC certification.

In terms of understanding the local ecological effects caused by fishing, there was some local and traditional knowledge that PCV fishers were able to provide. The fishers in PCV have a good understanding of the distribution of lobster in the areas

fished. There is good awareness of areas with high incidence of juveniles and these areas are avoided whenever possible. In addition, the fishers appear to be very aware of changes in catches and move to new locations whenever catches are down. This appears to help distribute the effort over space and time, thus reducing fishing pressure on any one area.

In discussions with fishers in PCV, it also became clear that there was a significant amount of knowledge about the distribution of habitat types in the fishery areas. However, this base of knowledge had not been captured in any formal way to better help local management efforts in terms of sensitive habitats. Today, it appears that the fishers in PCV are working with a local NGO (Instituto Terramar) to map the various types of habitats in the PCV fishing territory.

From this information, it appears that the local PCV fishery could meet the necessary requirements under Principle 2 of the MSC certification should the fishery ever be in a position to apply (i.e. the stock status changes due to improved management at the federal level). The fishers are actively engaged in efforts to better understand and mitigate the impacts of fishing within the geographic boundaries of the PCV fishery.

Two groups handle the management of the lobster fishery at PCV: the federal fishery management authority, IBAMA (Institute for the Environment and Natural Renewable Resources), and the local PCV fishing community.

At the federal level, there appears to be some changes necessary to improve the fishery. There are many regulations in place to protect the lobster fishery, but there appears to be a problem with proper enforcement. For example, there are laws making it illegal to land, sell, or transport lobsters smaller than 65 mm CL (*P. Argus*) and 59 mm CL (*P. laevicauda*).

Closed season

There is also a closed season from January to April. In addition, it is illegal to fish by commercial diving as this is considered to be a non-selective practice. While these laws are present, the certification team was told that there are many instances of



what Brazilians call “predatory fishing” where illegally fished and undersized lobsters are taken, sold, and exported (including to the United States) because there is a lack of federal government enforcement in the fishery.

In addition to the lack of enforcement, there also appears to be a power struggle within the federal government about who should control the management of fisheries. While IBAMA has traditionally had the responsibility, it appears now that the responsibility may be split with other agencies. This split in control along with declining budgets for fisheries management seems to be affecting fisheries management and enforcement in Brazil.

At the local level, the PCV fishing community appears to have excellent local management. The PCV community has a local management council and strict regulations regarding who can fish, what time of day fishing can occur, what can be caught.

In addition, the community has placed restrictions on gear, enforces closed seasons, and is working hard to patrol their own fishing territory to ensure that overfishing and predatory fishing do not occur.

There are severe penalties for those who violate the local fishing regulations from

losing permission to fish for given periods of time to having either fishing gear or boats confiscated.

In terms of meeting the MSC Principles and Criteria for management it is clear that the local PCV community has excellent measures in place to create a sustainable fishery within its local waters. However, it does not appear that the federal management would meet the stringent requirements of the MSC.

In general, we found that the Prainha do Canto Verde fishing community was doing everything it could to ensure the long-term sustainability of its fishery. The PCV community and fishers should be applauded for their hard work, their diligence, and their continued commitment to making their local fishery as sustainable as they possibly can.

Through no fault of its own, the PCV fishery at this time would not meet the MSC requirements as the stock is in serious decline with what appears to be little or no effort being made to reverse the situation. If ever the situation should change in Brazil, we believe the Prainha do Canto Verde lobster fishery would make an excellent candidate for MSC certification. In the meantime, we sincerely hope that any commercial concern purchasing lobster from PCV will recognize the efforts that these local fishermen continue to make toward the sustainability of their fishery. **3**

This document was prepared by Chet Chaffee, Scientific Certification Systems, Oakland, us, with assistance from Bruce Phillips, Curtin University of Technology, Perth, Australia for Prainha do Canto Verde, Brazil