

SPINY LOBSTER SESSIONS

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Spiny Lobster Management: Ways To Make It Work

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RESUMEN

Se presenta una revisión de los problemas inherentes al manejo, con ejemplos de las dificultades y formas de solucionarlas. Se discute el comportamiento y las actitudes de los pescadores, la gente que maneja las pesquerías, y como la comprensión de sus características puede ser de valor para alcanzar los resultados deseados. Se enfatiza la importancia de esquemas que consideran estilos de vida, actitudes, valores y en general factores socio-económicos; los cuales tienen una fuerte influencia en el éxito del manejo. Se presenta un examen de los problemas pesqueros comunes y se indica por qué son frecuentemente necesarias las soluciones especiales. También se indica la importancia de programas externos de asistencia a largo plazo. Se recalca la importancia de evaluar inicialmente los problemas y las soluciones y mantener la debida flexibilidad. Se discute la información y las circunstancias bajo las cuales esta es útil o necesaria. Se señala el amplio efecto que los pequeños cambios pueden tener sobre los integrantes de una pesquería. Se reconoce que la capacidad para resolver problemas pesqueros reside en las personas interesadas y dedicadas. Se enfatiza como un hecho demostrable que es posible producir y mantener niveles óptimos en la producción de langostas en forma indefinida, si decidimos hacerlo.

There are cultures on this planet where for many generations men and women lived together, produced children, and did not believe that a man and a woman making love had much to do with their having children. This belief did not cause any serious problems for them. Everything in their society functioned reasonably well. Their behavior was rather different from what we are accustomed to, because of their beliefs about reproduction. They did not have to understand all the technical details of reproduction that would explain why children are the result. They simply observed that when a man and a woman live together for a while children seem to appear in most cases. Some of you are probably asking yourselves what this has got to do with fishery management. I give this example because it illustrates how we can be confused and misled when we make assumptions about the behavior of others based on our own attitudes and beliefs. The attitudes and beliefs of the participants in a fishery and of those examining it from the outside can have a powerful effect on the success or failure of management.

There is something that I know all of you out there are aware of and that we sometimes forget. We *can* produce and sustain optimal levels of spiny lobsters forever. This is not an opinion or a hope. It is a demonstrable fact. There are no

insurmountable technical barriers to sustaining lobster fishery yields. There have not been any such barriers for years. We as human beings create the barriers and are responsible for them. What I am going to do for the next few minutes is to examine some of the barriers to successful management and suggest ways to overcome them or to bypass them altogether.

Let's start with the assumption that all is not well in a fishery. There is overfishing, dissatisfaction, too much effort, not enough catch, too little income, no control over exploitation and so on. For the situation to improve, something has to change. The general problems are usually similar anywhere. A common pitfall is to assume that if we all share common problems then there must be solutions in common. There are indeed some common solutions, but it is wise to search for specific solutions first. Common solutions may spring from these. The most effective solutions usually are simple ones that are not grand or impressive. One easy way to recognize an elegant simple solution is that it is not credited to any person or group for creating it. I had an experience in the Turks and Caicos Islands where some fishermen were highly suspicious of and opposed to the tagging of spiny lobsters. They felt tagging might have adverse effects on the spiny lobster stocks. Someone had the idea that if tagged lobsters were held in a large aquarium visible to fishermen they could then see for themselves whether or not the lobsters were affected seriously by the tags. Before long some fishermen were helping tag lobsters and were returning tagged lobsters. This was not a unique solution and it was appropriate. It is interesting that their suspicions arose from something fishermen experienced several decades ago. A visiting scientist was conducting experiments with commercial sponges. Most of the sponges in the islands died shortly after his visit. Their death was attributed by some to his actions, although sponges were dying of a disease in widespread areas of the Caribbean at that time.

One thing that fishery managers may become involved in is external assistance. Large, impressive, short term, capital intensive assistance programs are conceptually relatively easy to create and are attractive, but are often unwieldy, inflexible and unsuccessful. Longer term assistance on a less grand scale usually permits more flexibility and therefore more appropriate actions. The most difficult and important part of any assistance program is the initial evaluation of the problems and the possible solutions. Unfortunately the budgets of assistance programs often do not reflect the importance of this evaluation phase. The same is often true of domestic management programs. The larger the project the more important and the more difficult it is to evaluate its progress and to change its direction as it moves along.

Assistance programs and management programs often call for the gathering of information. This process is difficult, costly and time consuming. Therefore it is essential to constantly recheck what benefits will come out of the information. Many fisheries are managed with virtually no information, and some fisheries are managed with huge quantities of information. The process of generating new information too often becomes a substitute for taking action using existing knowledge. Sometimes we become obsessed by and deluged with information and this prevents us from evaluating its usefulness. Occasionally we are blinded to the fact that the initial justification for gathering the information was inappropriate or became inappropriate.

Another area I want to discuss has to do with change. Small changes can and do have startling effects on people. It is important to attempt to foresee the results of even subtle changes on the people in a fishery. The way people in a fishery behave is often the result of an extended period of evolution that has created a relatively predictable and stable situation. Introduction of small changes tends to destabilize everything by shifting the context in which the people are used to operating. This context can change extremely fast. An example would be the shift from a trade or barter economy to a cash economy, where the whole fabric of a group of people can be rapidly and radically altered. One reason that this is traumatic is that although man is perhaps a most adaptable animal he is also extremely contrary and is unconsciously triggered into survival behavior by threatening changes. Survival behavior is behavior that is based on what used to work. In the new situation what used to work may not work anymore. In addition people are very slow to change their attitudes and belief systems to fit the new context. As a result changes are adapted to slowly and sometimes with surprising resistance. One way to minimize the trauma and the difficulties is to involve all the participants in the changes and decisions as much as possible. Then the people have an investment in the decisions themselves. It is not easy to achieve, but it has been done successfully.

I have kept this discussion at a very broad level and I have not talked about many of the technicalities of management. Some of those areas will be covered in talks presented later today. I would like to close by saying a few words about tomorrow's spiny lobster workshop. This workshop belongs to you. The results will be created by you. Many of us live in a box called "I don't make a difference." We can live and die in a box if we choose to. We can also choose to break out of that box and discover that we can make a difference by participating 100 percent. I have said nothing dramatically new today. If you go back over the last few years of GCFI meetings you will find that I appear to have repeated things said before and that speakers before me have repeated things said by others in previous years. The point is that we can repeat ourselves forever and be ignored forever until we all acknowledge that the power to solve fishery problems rests with committed and concerned people. We are those people and we have that power. If we can't solve these problems it will be because we failed to take action ourselves. We must therefore recognize that we make a difference here and now, and we must act on that knowledge.