EVALUATION OF AN ECOSYSTEM APPROACH FOR THE MANAGEMENT OF THE COMMERCIAL BROWN SEAWEED *ASCOPHYLLUM NODOSUM* IN EASTERN CANADA.

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The harvest of the brown seaweed Ascophyllum nodosum (Rockweed) has been a traditional fishery for more than 40 years in eastern Canada, providing jobs for hundred of coastal residents. The management of marine plants, however, was until recently either a "laissez faire' or based on the traditional single species approach. In the early 90's and after a devastating socio-economic experience caused by the collapse of important groundfish fisheries in eastern Canada, stakeholders have demanded tighter regulations with a more integrative approach to marine resource management. Although the concept of ecosystem management in fisheries has been widely recognized very few attempts have been made to achieve it. The ecosystem aspect is critical for marine plants, especially kelps and large fucoids such as rockweed, which have been recognized as both a resource and a habitat, consequently these seaweeds cannot be exploited under the concept of single species resource sustainability. In 1995 the harvest of rockweed expanded from Nova Scotia to the unexploited area of southern New Brunswick and a new management strategy that integrate the resource, the habitat and other commercial and non-commercial species was implemented. Maximum exploitation rate, cutting height, gear restrictions, and protected areas were management measures within a precautionary four-year pilot harvest plan. A research and monitoring program involving the industry, universities and the provincial and federal government was simultaneously initiated to evaluate the effect of the harvest on the resource and associate species and to provide information to improve the management of rockweed. In 1999 a scientific peer committee reviewed this pilot harvest plan. The consensus was that the harvest impact the habitat was minimal and of short duration, therefore it was advised to continue the harvest but to maintain the precautionary approach to management. After seven years, an evaluation of the successes and challenges of this ecosystem approach to marine resource management in eastern Canada is presented here.