

FAO supported the 4th International Symposium on GIS/Spatial Analyses in Fishery and Aquatic Sciences

José Aguilar-Manjarrez¹ and Fabio Carocci²

¹Aquaculture Management and Conservation Service (FIMA)

²Fisheries Management and Conservation Service (FIMF)

FAO Fisheries and Aquaculture Department, Rome, Italy

Jose.AguilarManjarrez@fao.org

Fabio.Carocci@fao.org

FAO actively participated in this symposium with:

two keynote speeches²

- ▶ Status of GIS, remote sensing and mapping in addressing the principle, objectives and practices of the ecosystem approach to aquaculture (EAA) (J. Kapetsky, J. Aguilar-Manjarrez and D. Soto);
- ▶ Status and potential of GIS in implementing the ecosystem approach to fisheries (EAF) (F. Carocci, G. Bianchi, P. Eastwood and G. Meaden);

one oral presentation

- ▶ The potential for open ocean aquaculture in Exclusive Economic Zones from global and national perspectives (J. Kapetsky and J. Aguilar-Manjarrez) (Figure 1);

a PC demonstration

- ▶ GISFish³ (J. Aguilar-Manjarrez, J. Kapetsky and F. Carocci) and

a poster presentation

- ▶ Identification of reef habitat of the endangered Napoleon Fish using remote sensing and GIS (F. Carocci).

FAO also participated in the sum-up panel discussion session which highlighted the progress being made and discussed ways to move forward.

The main theme of the symposium was the move towards Ecosystem Approach to Aquaculture (EAA) and Ecosystem Approach to Fisheries (EAF), whose application is likely to increase over the next decade. From a GIS perspective, it was noted that the EAA and EAF have many attributes which are common to both aquaculture and fisheries in terms of issues, technological developments as well as data

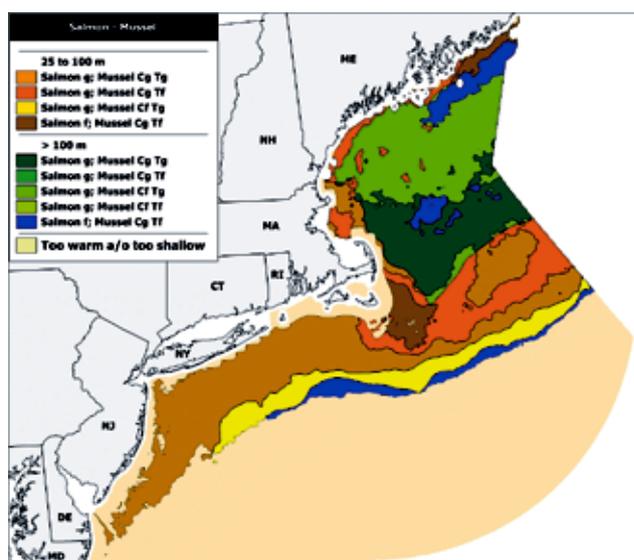


Figure 1. Areas in the United States of America Eastern Exclusive Economic Zones in which Atlantic salmon and blue mussel culture could be integrated which could result in high productivity for both species in terms of depths within the limits of cages and long lines. (Source: symposium presentation by Kapetsky and Aguilar – available at www.fao.org/fishery/gisfish/id/4974)

needs. Addressing and taking advantage of these commonalities in implementing EAA and EAF can lead to cost-effective data collection, data processing, spatial analyses and training. While economic or social factors relating to spatial aspects of fisheries or aquaculture were not highlighted during the symposium, in the future, this is likely to change as EAA and EAF become widely applied as important management tools for sustainable aquaculture and responsible fisheries.

¹The symposium, held at Santa Ursula University, Rio de Janeiro, Brazil from 25 to 29 August 2008, is a tri-annual event organized by the Fishery-Aquatic GIS Research Group, a non-profit organization established in 1977 and based at the Environmental Simulation Laboratory in Kawagoe, Saitama, Japan.

²www.fao.org/fishery/gisfish/id/5003

³www.fao.org/fishery/gisfish