
GOVERNMENT NOTICE

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM

No. 657

13 June 2008

MARINE LIVING RESOURCES ACT, 1998 (ACT NO. 18 OF 1998) DRAFT GUIDELINES FOR MARINE RANCHING

I, Marthinus Christoffel Johannes Van Schalkwyk, Minister of Environmental Affairs and Tourism, hereby, publish for public comment, the draft Guidelines for Marine Ranching and Stock Assessment in South Africa and the draft Guidelines and Potential Areas for Ranching and Stock Enhancement of Abalone (*Haliotis Midas*) in South Africa in the Schedule.

Any person who wishes to submit representations or comments in connection with the draft guidelines are invited to do so by 16h00 **FRIDAY 29 August 2008**. All representations and comments must be submitted in writing to the Deputy Director-General of the Department of Environmental Affairs and Tourism, Branch Marine and Coastal Management:

By post to: The Deputy Director-General:
Environmental Affairs and Tourism
Marine and Coastal Management
Attention: Mrs. Betsie Taylor
Private Bag X2
Roggebaai, 8012

By fax to: (021) 402 3670, and by e-mail to aquaculture@deat.gov.za

MARTHINUS VAN SCHALKWYK,
MINISTER OF ENVIRONMENTAL AFFAIRS AND TOURISM

SCHEDULE

**GUIDELINES FOR MARINE RANCHING
AND STOCK ENHANCEMENT
IN SOUTH AFRICA**

Department of Environmental Affairs and Tourism

May 2008



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

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1. INTRODUCTION

Environmental degradation and poor fisheries management have caused several of the world's fisheries to decline or even collapse. At the same time the demand for fishery products globally is expanding. In order to meet the shortfall, ranching and/or stock enhancement has been used in other countries to sustain continued production from the marine environment.

Definitions and Scenarios of Marine Ranching and Stock Enhancement

- Marine Ranching

Bannister (1991)¹ defines marine ranching (reseeding) as "Identifiable stock released with the intention of being harvested by the releasing agency."

- Stock Enhancement

Bannister (1991) defines enhancement as "The releasing of stock for the public good without the intention of directly benefiting an exclusive user group". Generally this would imply some form of government assistance.

The primary objectives for ranching and stock enhancement are the following:

1. Restocking, which is undertaken to compensate for depletion or eradication of a species, to replenish an area where it used to occur but has since been eradicated (re-introduction), or to provide additional spawning stock to an area where the fishery has declined or collapsed (supplementation). Restocking may also be considered to further improve production in an already sustainable fishery.
2. Augmentation is undertaken to compensate for loss of or damage to the habitat through stock release. It recognises the effect of the modified habitat through the release of fish at a size or age when the habitat is no longer a limiting factor. Some habitats cannot support animals at an early stage of development but may support older animals.

¹ Cited in Borg 2004

3. Addition, when a new species is translocated into an area outside its natural range. The ongoing experiment with abalone on the West Coast is an example of this practice. The production and stocking of trout for recreational fishing is another well-known example.

The deliberate or accidental release of a species into a marine environment outside its “current” distribution range is referred to as an introduction (introduced species = alien, non-indigenous etc.). The movement of individuals of a species or populations from one location to another within its current range is called a transfer. (Precautions to be taken when these activities are undertaken are contained in international codes such as the ICES Code of Practice on the Introductions and Transfers of Marine Organisms).

The terms “indigenous” and “alien” are used according to the definitions provided in the National Environmental Management: Biodiversity Act, No 10 – 2004, as follows:

“indigenous species” means a species that occurs, or has historically occurred, naturally in a free state in nature within the borders of the Republic, but excludes a species that has been introduced in to the Republic as a result of human activity.

“alien species” means-

a) a species that is not an indigenous species.

The risk of unpredictable harmful effects that stocking could bring about is accepted by some as sufficient reason to resist the practice of stocking altogether. Others adopt a more flexible position that accepts that circumstances do exist where stocking would be acceptable, provided it takes place in accordance with appropriate standards and protocols. This document is developed on the basis that the policy on marine aquaculture in South Africa will be based on the latter position. The applications for specific marine ranching projects would be evaluated on their merits.