

## **A resource management scenario for traditional and scientific management of pink shrimp (*Farfantepenaeus paulensis*) in the Patos Lagoon estuary (RS), Brazil**

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### **Background**

This article aims to discuss the incorporation of traditional time in the construction of a management scenario for pink shrimp in the Patos Lagoon estuary (RS), Brazil. To meet this objective, two procedures have been adopted; one at a conceptual level and another at a methodological level. At the conceptual level, the concept of traditional time as a form of traditional ecological knowledge (TEK) was adopted.

### **Method**

At the methodological level, we conduct a wide literature review of the scientific knowledge (SK) that guides recommendations for pink shrimp management by restricting the fishing season in the Patos Lagoon estuary; in addition, we review the ethno-scientific literature which describes traditional calendars as a management base for artisanal fishers in the Patos Lagoon estuary.

### **Results**

Results demonstrate that TEK and SK describe similar estuarine biological processes, but are incommensurable at a resource management level. On the other hand, the construction of a “management scenario” for pink shrimp is possible through the development of “criteria for hierarchies of validity” which arise from a productive dialog between SK and TEK.

### **Conclusions**

The commensurable and the incommensurable levels reveal different basis of time-space perceptions between traditional ecological knowledge and scientific knowledge. Despite incommensurability at the management level, it is possible to establish guidelines for the construction of “management scenarios” and to support a co-management process.

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