

Europe's largest aquaculture venture: an inspiring approach to sustainability.  
La mayor empresa de acuicultura de Europa: un acercamiento inspirador a la sostenibilidad.



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VOLUME 30 NUMBER 03 MAY/JUNE 2007

**AQUACULTURE TODAY 2007** 17-18 APRIL  
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Atlantic Arc

The prospects for extensive aquaculture operations are looking bright

## Europe's largest aquaculture venture: an inspiring approach to sustainability



WITH 50 ponds totalling 3200 ha, the extensive aquaculture installations of Veta La Palma in Spain are the largest in Europe. They annually yield around 1000 tonnes of a mixture of native species - eels, shrimp, mullet, sea bass, sea bream and sole - that are marketed under the brand name Isla Sur by Pesquerías Isla Mayor.

But despite its vast surface area, this aquaculture operation has not only managed to minimise its ecological footprint, it has also managed to restore the ecology of a wide expanse of former wetlands that had been largely destroyed by a flood control scheme. Veta La Palma has gained international recognition for its creative approach to conservation because the project manages to combine the economic benefits of aquaculture with objectives in conservation and ecotourism.

Veta La Palma is located at the southern tip of Isla Mayor between the Guadalquivir river and the internationally important wetlands of Andalucía's Doñana National Park. At the beginning of the 20th century the site, which actually totals 11,300 ha, was swallowed up in a vast land reclamation and flood control plan,

which involved the construction of a network of drainage canals and protective embankments to create land suited for rice paddy and for cattle farming. That this effectively destroyed the natural ecology of a huge area of seasonal wetlands, particularly to the detriment of water birds, was not given a second thought at the time.

But fortunately in 1982, when the site came under the control of Pesquerías Isla Mayor, the damage was reversed by a process of controlled reflooding. A pumping station was set up beside the Guadalquivir river to reverse the direction of water flow in the drainage channels, effectively converting them to irrigation channels. The impressive result has been a model of integrated management for aquaculture and conservation.

### Sanctuary

Extensive areas of shallow lagoons are now set aside for water birds, particularly waders, so that Veta La Palma has become a bird sanctuary of international importance, to the great delight of visiting ornithologists and other ecotourists. In addition, 100 islands have been built within the lagoons to serve as sanctuaries and nesting sites, and the embankments have undergone extensive revegetation. The water flow is carefully managed so that the lagoons are never stagnant and so that the organic content supports a rich flora and fauna, particularly the dense communities of invertebrates species on which water birds thrive. A total of 250 bird species have been recorded, of which no fewer than 50 have special conservation interest. At times 80% of the birds of Doñana are concentrated in Veta La Palma, and these managed wetlands, which are now flooded for much greater periods than if they were left to nature alone, are also of great importance to migratory birds.

One of the project's biologists, Miguel Medialdea, admits that the bird populations are responsible for significant fish losses, in a situation that could be balanced if local administrators would compensate for the efforts made to develop production methods that enhance the environment. In what is truly an inspirational model of integrated and sustainable aquaculture, Veta La Palma is starting to influence plans for the regeneration of other saltmarsh areas and coastal wetlands in Spain and beyond. The prospects for extensive aquaculture projects are looking bright as long as they can combine both economic and ecological sustainability.



Advertising Feature



Top: Location of Veta la Palma, east to Doñana National Park and within Doñana Great Ecosystem (SW Spain).

Middle: Harvesting sea bass.

Bottom: Extensive areas are set aside for water birds.