

## **'Garden of Eden' dying of poison 5,000-year-old Marsh Arab haven is devastated by fishermen's use of chemicals and electric shocks**

**Rory Carroll in Baghdad**

**Tuesday April 19, 2005**

**The Guardian**

Farmers and fishermen are devastating Iraq's marshes, considered by some to be the site of the Garden of Eden, with uncontrolled use of chemicals and fishing using electric shocks, researchers warned yesterday.

The illegal methods are wiping out wildlife, polluting water, endangering human health and undermining the recovery of one of the world's great wetlands, they say.

The marshes are part of what British troops stationed there call Iraq's "wild, wild east", a remote, lawless region where impoverished communities have a tradition of defying authority.

Since the US-led invasion toppled Saddam Hussein two years ago there has been a boom in the use of electroshocking - nets attached to car batteries - to catch fish, says Iraq Nature, an environmental group.

Many of the fish not caught are left sterilised or dead, the rotting bodies spawning organic matter which uses up oxygen that in turn allows bacteria to flourish, upsetting the ecological balance.

The damage is made worse by farmers using chemicals intended to treat lice in sheep as pesticides for their crops and by hunters using poison to catch birds.

The deputy health minister, Amer al-Khuza'i, yesterday urged Iraq's most revered cleric, Grand Ayatollah Ali al-Sistani, to issue a fatwa against misuse of the chemicals and poison.

Originally twice the size of the Florida Everglades, the 8,000 square miles of marshes - an area bigger than Yorkshire - were fed by the Tigris and Euphrates rivers and were home to hundreds of species of birds and fish.

The 5,000-year-old Marsh Arab culture, based on artificial islands and houses made from tall reeds, is considered a cradle of civilisation.

The Marsh Arabs were accused of helping and harbouring rebels and outlaws during the failed Shia uprising against Saddam after the 1991 Gulf war, prompting a devastating crackdown.

Thousands were killed and a gargantuan dyke-building programme drained the marshes to just 7% of their original extent, a catastrophe compared to the drying up of the Aral sea in central Asia and the

deforestation of the Amazon.

When coalition troops overthrew the regime, the surviving Marsh Arabs broke many of the dykes and water flooded back, restoring much of the wetland. Earlier this year the journal Science reported the return of giant reeds, water birds and otters, prompting optimism that recovery was under way.

But Iraq Nature researchers who have visited the region each month for the past year said thousands of fishermen were boosting their catch by connecting cheap car batteries with cables to two-metre (6ft) poles with nets. The 12-volt shock electrocuted fish within a 5-metre radius, yielding 20kg of fish each day per fisherman.

"They know it is wrong but they are poor and say it is the only way to feed their families," said Raied Hameed, one of the researchers. "It is a very serious problem for the marshes."

The Iraqi police and army seldom ventured into the countryside and the British forces know better than to inflame protests by intervening, he added.

With few schools, clinics, roads or jobs the region sees little reason to obey authorities which historically have been at best neglectful, at worst murderous.

Anna Sophia Bachmann, an adviser to Iraq Nature, said electroshocking probably started in the 80s during the chaos of war with Iran and resumed with a vengeance with the partial restoration of the marshes two years ago.

In a separate warning, Qais al-Salman, head of the National Institute of Environmental and Water Technology, said the marsh's farmers and hunters could unleash a "complete disaster" for public health and the environment.

Birds which recently started to return were being poisoned and sold in markets.

Veterinary chemicals intended for sheep were being used to dust crops and poison fish, he said.