

7. Further updates on EUS status in southern Africa

Since the Task Force mission in May 2007, confirming EUS in fishes in Botswana, further confirmation of EUS occurrence in freshwater fishes in Namibia and Zambia followed. Fish samples suspected to be infected with EUS were sent to AAHRI for processing and/or confirmation.

In Zambia, based on preliminary outcome of 2007 surveillance work carried out by a team from the University of Zambia led by Dr Bernard M. Hang'ombe, prevalence can go as high as 50 percent in new areas of Zambezi and Chavuma districts where the disease is spreading. These districts are located on the upstream Zambezi River bordering Angola. The Barotse plains in the Western Province of Zambia was seriously hit by EUS in May, June, July and August 2007. However, there have been no reported cases in 2008, even though a prevalence rate of 5 percent per catch has been observed in Sesheke District where the disease was first noticed in Zambia.

In Namibia, based on surveillance work carried out by Dr Ben C.W. Van Der Waal of the Integrated Management of the Zambezi/Chobe River System Fishery Resource and a staff of the Ministry of Fisheries and Marine Resources of Namibia Project, small outbreaks of EUS have been found in 2008 in the Chobe River area of the Zambezi floodplain. A few isolated cases of infected fish were also collected in the Zambezi itself. Inspection of large fish during the 2007 and 2008 annual international angling competition demonstrated the occurrence of EUS on a considerable number of larger cichlids, especially Nembwe (*Serannochromis robustus*) in 2007 and pink bream/happy (*Sargochromis giardi*) in 2008. The occurrence seems to be sporadic and changing amongst species. In early November 2008, some tilapia [3 percent in one farm] from two fish farms in the Kavango Region of Namibia were found with lesions that could be related to EUS. Samples have been collected and confirmed by the School of Veterinary Medicine of the University of Zambia in Lusaka. The veterinary authorities are on alert and preventive measures will be taken.

The above updates bring to three the countries in southern Africa that are positively infected with EUS. The confirmation of EUS in southern Africa adds more than 20 species to the growing list of species at risk to EUS. These include the following species: dashtail barb (*Barbus poechii*), straightfin barb (*B. paludinosus*), Thamalakane barb (*B. thamalakanensis*), Longbeard barb (*B. unitaeniatus*), striped robber (*Brycinus lateralis*), silver robber (*Micralestes acutidens*), tigerfish (*Hydrocynus vittatus*), African pike (*Hepsetus odoe*), sharptooth catfish (*Clarias gariepinus*), Blunntooth catfish (*C. ngamensis*), silver catfish (*Schilbe intermedius*), Upper

Zambezi labeo (*Labeo lunatus*), Redeye labeo (*L. cylindricus*), bulldog (*Marcusenius macrolepidotus*), churchill (*Petrocephalus catostoma*), threespot tilapia (*Oreochromis andersonii*), greenhead tilapia (*O. macrochir*), banded tilapia (*Tilapia sparrmanii*), Green bream/happy (*Sargochromis codringtonii*), rainbow bream/happy (*S. carlottae*), pink bream/happy (*S. giardi*), thinface largemouth (*Serranochromis angusticeps*) and Nembwe (*S. robustus*). Plate 10 shows some photographs of EUS-positive fish from Namibia and Zambia; Plate 11 shows examples of fish from Namibia with lesions that have not been confirmed by laboratory analysis as related to EUS. Figure 2 shows the current global distribution of EUS.

The list of freshwater fish species at risk from EUS can be found in Table 5 (African fish species) and Table 6 (OIE, 2006).

TABLE 5
Fish species susceptible to EUS in southern Africa

Scientific name	Local name	Country with confirmed diagnosis (year)
<i>Barbus poechii</i>	dashtail barb	Botswana (2007) Namibia (2007) Zambia (2007)
<i>Barbus paludinosus</i>	straightfin barb	Namibia (2007)
<i>Barbus thamalakansensis</i>	Thamalakane barb	Botswana (2007)
<i>Barbus unitaeniatus</i>	longbeard barb	Namibia (2008)
<i>Brycinus lateralis</i>	striped robber	Namibia (2007)
<i>Clarias gariepinus</i>	sharptooth African catfish	Namibia (2007) Zambia (2008)
<i>Clarias ngamensis</i>	blunt-toothed African catfish	Namibia (2007) Zambia (2007)
<i>Clarias sp.</i>	catfish	Zambia (2007)
<i>Hepsetus odoe</i>	African/Kafue pike	Zambia (2007) Namibia (2007)
<i>Hydrocynus vittatus</i>	tigerfish	Namibia (2007)
<i>Labeo lunatus</i>	upper Zambezi labeo	Botswana (2007) Namibia (2007)
<i>Labeo cylindricus</i>	red-eye labeo	Namibia (2008)
<i>Marcusenius macrolepidotus</i>	bulldog	Namibia (2007)
<i>Micralestes acutidens</i>	silver robber	Namibia (2007)
<i>Oreochromis andersonii</i>	three-spotted tilapia	Namibia (2007) Zambia (2007)
<i>Oreochromis macrochir</i>	greenhead tilapia	Namibia (2007)
<i>Petrocephalus catostoma</i>	churchill	Botswana (2008)
<i>Pharynchochromis acuticeps</i>	Zambezi River bream	Namibia (2008, suspected)
<i>Sargochromis codringtonii</i>	green beam/happy	Namibia (2008) Zambia (2007)
<i>Sargochromis carlottae</i>	rainbow bream/happy	Namibia (2008)
<i>Sargochromis giardi</i>	pink bream/happy	Namibia (2008)
<i>Schilbe intermedius</i>	silver catfish	Namibia (2007) Zambia (2007)
<i>Serranochromis robustus</i>	Nembwe	Namibia (2007, suspected) Zambia (2007)
<i>Serranochromis angusticeps</i>	thinface largemouth	Namibia (2008, suspected) Zambia (2007)
<i>Serranochromis macrocephalus</i>	purpleface largemouth	Namibia (2008, suspected)
<i>Tilapia rendalli</i>	redbreast tilapia	Namibia (2008)
<i>Tilapia sparrmanii</i>	banded tilapia	Namibia (2008)

