FULL ACCOUNT FOR: *Lates niloticus*

**Common name**  
Persico del nilo (Italian), Nile perch (English), Nibbarsch (German), nijlbaars (Dutch), sangara (Kiswahili), Victoria perch (English), victoriabaars (Dutch), chengu (Kijitta), mbuta (Kiluo), perché du nil (French), victoriabarsch (German), perca di nilo (Spanish), nilabborre (Swedish)

**Synonym**  
Perca latus, Geoffroy Saint-Hilaire, 1827  
*Lates niloticus*, var. *macrolepidota* Pellegrin, 1922  
*Lates albertianus*, Worthington, 1932  
*Lates niloticus rudolfianus*, Worthington, 1932

**Similar species**

**Summary**  
The Nile perch (*Lates niloticus*) is a large freshwater fish. Also known as capitaine, mputa or sangara, it can grow up to 200kg and two metres in length. It was introduced to Lake Victoria in 1954 where it has contributed to the extinction of more than 200 endemic fish species through predation and competition for food.

**Species Description**
Large perch-like predator. Dorsal fin deeply notched, giving the appearance of two separate fins; the first part completely spinous; third dorsal spine enlarged. Lateral line continuous. Pre-orbital and pre-opercular bones with spines; a large spine on operculum.

**Lifecycle Stages**
In Lake Victoria, male size at first maturity 50-55cm TL (ca. 2 years), females 67,5-85cm TL (2-4 years). Fifty percent maturity at 60-74cm TL for males and 102-110cm TL for females. Maturity sizes strongly decreasing in recent years.
Uses
Nile perch took decades to become evident in Lake Victoria and then burst into the huge biomass of the late 1980s and 1990s and the subsequent harvest for export. It rose to become the main fishery species in the lake in the late 1990s and the basis of a huge export industry. This raised the price of Nile perch to something beyond the reach of many lakeside communities. All of this was documented in the first two phases of an IUCN-World Conservation Union’s Nile perch project, which culminated in the making of the film “Big fish, small fry”. The project has moved on to conflict resolution and capacity building using “beach units” to give more responsibility and management involvement to local people. This work is supported by the three riparian government fisheries departments, through the Lake Victoria Fisheries Organisation (LVFO), and is currently being reviewed.

In recent years the Nile perch population has begun to stabilise and the availability of large fish has declined as has the catch which is now way below the capacity of the factories which process and export the fish to USA, Europe, Australia and New Zealand. The view of the three riparian governments is that Nile perch is an essential export earner and they have attempted to brand it as “organic”, as it is wild and without artificial additives etc. (although cage rearing has begun). This same export has brought some benefits to the local people (in income from fishing and jobs in factories) and some disbenefits from availability of fish for food and economic and social upheaval (Howard, G., pers. comm., August 2005).

Habitat Description
Freshwater species, but living in brackish waters in Lake Mariout. Introductions in Lake Victoria were mainly from Lake Albert, but also from Lake Turkana. The present populations in Lake Victoria are apparently not pure *Lates niloticus* but contain some genetic material from *Lates macrophtalmus* from Lake Albert.

Reproduction
Free spawning over shallow sheltered areas, all the year round with peaks in rainy season. Up to 16 million eggs per breeding cycle.

Nutrition
Large predator, feeding in Lake Victoria on haplochromine cichlids, the zooplanktivorous cyprinid *Rastrineobola argentea*, the prawn *Caridina nilotica* and juvenile Nile perch (cannibalism). Young stages feed on invertebrates.

General Impacts
The Nile perch is responsible through predation and competition for food for the decimation and possible disappearance of two hundred or more species of the unique flock of endemic haplochromine cichlids in Lake Victoria.

Management Info
Eradication of the Nile perch in Lake Victoria is impossible in practice, and is also not an option because of its economic success.
Introduction for fisheries purposes.

Principal source:

Compiler: Dr. Jos Snoeks, Africa Museum, Leuvensesteenweg, Tervuren, Belgium & IUCN/SSC Invasive Species Specialist Group (ISSG)

Review: Dr. Jos Snoeks, Africa Museum, Leuvensesteenweg, Tervuren, Belgium.

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ALIEN RANGE

[C1] CUBA  [1] LAKE VICTORIA  [1] UNITED STATES

Red List assessed species 145: CR = 51; EN = 2; VU = 17; DD = 62; LC = 13;

**Allochromis welcommei** VU  
**Astatotilapia piceatus** CR  
**Brycinus jacksonii** EN  
**Haplochromis acinens** DD  
**Haplochromis altigenis** DD  
**Haplochromis apogonoides** CR  
**Haplochromis argenteus** CR  
**Haplochromis barbaraee** CR  
**Haplochromis bartozi** DD  
**Haplochromis boops** DD  
**Haplochromis bwathondii** VU  
**Haplochromis cavifrons** DD  
**Haplochromis chromogynos** VU  
**Haplochromis cinclus** CR  
**Haplochromis chesteri** CR  
**Haplochromis crassilabris** CR  
**Haplochromis crousii** DD  
**Haplochromis cryptogramma** DD  
**Haplochromis deliciostoma** DD  
**Haplochromis dichrous** CR  
**Haplochromis dolichorhynchus** DD  
**Haplochromis erythrocephalus** DD  
**Haplochromis eutaenia** DD  
**Haplochromis flavipinnis** CR  
**Haplochromis goweri** DD  
**Haplochromis harpakteridion** DD  
**Haplochromis hiatus** CR  
**Haplochromis iris** CR  

**Astatoreochromis alluaudi** LC  
**Bagrus docmak** LC  
**Brycinus sadleri** LC  
**Haplochromis aelocephalus** CR  
**Haplochromis antleri** CR  
**Haplochromis arcanus** DD  
**Haplochromis artaxerxes** DD  
**Haplochromis bareli** CR  
**Haplochromis bayoni** DD  
**Haplochromis brownii** CR  
**Haplochromis cassius** CR  
**Haplochromis chlorochrous** DD  
**Haplochromis chrysogynaia** DD  
**Haplochromis cinereus** DD  
**Haplochromis coprologus** CR  
**Haplochromis crocopeplus** CR  
**Haplochromis cryptodon** DD  
**Haplochromis cyanus** EN  
**Haplochromis dentex** CR  
**Haplochromis diplotaenia** DD  
**Haplochromis empodisma** DD  
**Haplochromis estor** DD  
**Haplochromis fischeri** VU  
**Haplochromis giberti** DD  
**Haplochromis granti** CR  
**Haplochromis heusinkveldii** CR  
**Haplochromis humilior** DD  
**Haplochromis ishmaelii** CR
**Haplochromis katunzii** CR  
**Haplochromis labriformus** DD  
**Haplochromis laparogramma** LC  
**Haplochromis lividus** DD  
**Haplochromis macrognathus** CR  
**Haplochromis maculipinna** DD  
**Haplochromis mandibularis** DD  
**Haplochromis maxillaris** VU  
**Haplochromis melanopterus** VU  
**Haplochromis melichrous** DD  
**Haplochromis michaeli** CR  
**Haplochromis mylergates** CR  
**Haplochromis nigrescens** DD  
**Haplochromis nyanzae** DD  
**Haplochromis obtusidens** DD  
**Haplochromis pallidus** LD  
**Haplochromis paraquartii** DD  
**Haplochromis paropius** LC  
**Haplochromis pellegrini** DD  
**Haplochromis perrieri** CR  
**Haplochromis phthtophaques** DD  
**Haplochromis pimarni** DD  
**Haplochromis plagiosoma** DD  
**Haplochromis prodromus** DD  
**Haplochromis pseudopellegrini** DD  
**Haplochromis pyrrococephalus** LC  
**Haplochromis riponius** LC  
**Haplochromis serranuus** DD  
**Haplochromis sphex** CR  
**Haplochromis sp. nov. 'micro-obesus'** CR  
**Haplochromis sulphureus** CR  
**Haplochromis teegelaari** CR  
**Haplochromis thellodn** CR  
**Haplochromis thuraugnathus** DD  
**Haplochromis tyrianthinus** DD  
**Haplochromis vanolijeni** VU  
**Haplochromis vonlinpei** CR  
**Haplochromis xenognathus** LC  
**Hoplotilapia retrodens** VU  
**Macropleurodus bicolor** VU  
**Mormyrus kannume** LC  
**Oreochromis variabilis** CR  
**Platyaeniodus degeni** LC  
**Pyxichromis parorthostoma** DD  
**Yssichromis fusiformis** VU

BIBLIOGRAPHY

13 references found for *Lates niloticus*

**Management information**


**Summary:** The electronic tool kits made available on the Cefas page for free download are Crown Copyright (2007-2008). As such, these are freeware and may be freely distributed provided this notice is retained. No warranty, expressed or implied, is made and users should satisfy themselves as to the applicability of the results in any given circumstance. Toolkits available include 1) FISK- Freshwater Fish Invasiveness Scoring Kit (English and Spanish language version); 2) MFISK- Marine Fish Invasiveness Scoring Kit; 3) MI-ISK- Marine invertebrate Invasiveness Scoring Kit; 4) FI-ISK- Freshwater Invertebrate Invasiveness Scoring Kit and AmphISK- Amphibian Invasiveness Scoring Kit. These tool kits were developed by Cefas, with new VisualBasic and computational programming by Lorenzo Vilizzi, David Cooper, Andy South and Gordon H. Copp, based on VisualBasic code in the original Weed Risk Assessment (WRA) tool kit of P.C. Pheloung, P.A. Williams & S.R. Halloy (1999).

The decision support tools are available from:
[Accessed 13 October 2011]

The guidance document is available from http://www.cefas.co.uk/media/118009/fisk_guide_v2.pdf [Accessed 13 January 2009].


**Summary:** The discussion paper presents a conceptual risk assessment approach for freshwater fish species that addresses the first two elements (hazard identification, hazard assessment) of the UK environmental risk strategy. The paper presents a few worked examples of assessments on species to facilitate discussion.

Available from: http://www.cefas.co.uk/publications/techrep/tech129.pdf [Accessed 1 September 2005]


**Summary:** The suggestion that the fishery in Lake Victoria would benefit if the *Nile perch* were introduced is based on ignorance of several fundamental biological concepts. Such an introduction is not only undesirable but would jeopardize the existing commercial fishery.
In 1993, Canada, Mexico and the United States signed the North American Agreement on Environmental Cooperation as a side agreement to the North American Free Trade Agreement (NAFTA). The NAAEC established the Commission for Environmental Cooperation (CEC) to help the Parties ensure that improved economic efficiency occurred simultaneously with trinational environmental cooperation. The NAAEC highlighted biodiversity as a key area for trinational cooperation. In 2001, the CEC adopted a resolution (Council Resolution 01-03), which created the Biodiversity Conservation Working Group (BCWG), a working group of high-level policy makers from Canada, Mexico and the United States. In 2003, the BCWG produced the ?Strategic Plan for North American Cooperation in the Conservation of Biodiversity.? This strategy identified responding to threats, such as invasive species, as a priority action area. In 2004, the BCWG, recognizing the importance of prevention in addressing invasive species, agreed to work together to develop the draft CEC Risk Assessment Guidelines for Aquatic Alien Invasive Species (hereafter referred to as the Guidelines). These Guidelines will serve as a tool to North American resource managers who are evaluating whether or not to introduce a non-native species into a new ecosystem. Through this collaborative process, the BCWG has begun to implement its strategy as well as address an important trade and environment issue. With increased trade comes an increase in the potential for economic growth as well as biological invasion, by working to minimize the potential adverse impacts from trade, the CEC Parties are working to maximize the gains from trade while minimizing the environmental costs.


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Summary: This book covers the impact of species changes engendered by the introduction of fish species, impoundment and heavy exploitation. Aspects considered include reduction of biodiversity, the conservation of unique endemic faunas, the assessment of changes in Witte, F., Van Densen, W. L. T. 1995. Fish stocks and fisheries of Lake Victoria. Samara Publishing Ltd., UK. 404pp.

Summary: The results of eighteen years research on the fisheries of Lake Victoria are presented. The introduction is followed by sections dealing successively with fish and fisheries, methodologies for sampling, gear and boats, methods for monitoring fish stocks,

General information

FishBase, 2005. Species profile Lates niloticus Nile perch

Summary: FishBase is a global information system with all you ever wanted to know about fishes. FishBase on the web contains practically all fish species known to science. FishBase was developed at the WorldFish Center in collaboration with the Food and Agriculture Organization of the United Nations (FAO) and many other partners, and with support from the European Commission (EC). Since 2001 FishBase is supported by a consortium of seven research institutions. You can search on Search FishBase

This species profile is available from: http://www.fishbase.org/Summary/SpeciesSummary.cfm?id=347i [Accessed 21 March, 2005]


Summary: The database includes records of aquatice species introduced or transferred from one country to another and does not consider movements of species inside the same country. Coverage of accidental introductions of organisms (e.g., through ship ballast waters) is not complete and records on this topic have been generally entered only when important impacts on fisheries or on the environment have been causd.


Summary: Several populations of Nile perch have been used to stock the lakes of the Lake Victoria system. The taxonomic status of the introduced populations has been examined through enzyme analysis. Genetically, introduced Nile perch in Lakes Kyoga and Nabugabo


ITIS (Integrated Taxonomic Information System), 2005. Online Database *Lates niloticus*

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
