

OUR AMUR

GREAT RIVER OF NORTH-EAST ASIA

Due to its great importance for nature conservation the Amur River has been recognized as a globally important freshwater ecoregion. It is not only an important natural riverine ecosystem, but it is also one of the remaining three largest free-flowing rivers in the world. The Amur basin is also an international transboundary river basin with sharp cultural, economic and demographic contrasts, where environmental problem-solving requires international cooperation.

The Amur River watershed covers more than 1,800,000 square kilometers divided between Russia, China, and Mongolia. More than 4,000 kilometers of national borders lie along the Amur and its tributaries, making it the longest transboundary river in the world. More than 30 distinct ethnic groups populate the Amur basin.

Amur River waters flow about 4,500 kilometers from the interior of the Asian continent to the Pacific Ocean.

The Amur basin landscape diversity is astonishing. There are prairies at the Khanka Lake lowlands and rich Korean Pine mixed broadleaf forests at the Sikhote-Alin Mountains. The alpine tundras of Stanovoy Ridge and steppes of Dauria contrast the wet meadows on the Sanjiang Plain and the volcanic lake at the top of Baitoushan Mountain.

The most valuable landscapes are the wide wetland belts along the Amur and its tributaries, which serve as spawning grounds for fish and migratory corridors for millions of birds on major Asian flyways. Breeding ranges and stop-over sites for many species are now limited to a narrowing belt along the Amur River where only the annual floods protect these wetlands from agricultural development. The Amur valley and its flood lands are the last nesting areas for 95 % of the world population of Oriental White Stork, 65 % of Red-crowned Cranes and 50 % of White-naped Cranes.

Situated at the overlap of several biogeographic zones, the Amur basin supports rich biodiversity. There are more than 5,000 species of vascular plants, more than 400 species of birds, more than 70 species of mammals, including Amur tiger and Amur leopard. Over 120 fish species inhabit Amur, among them 7 migratory species of pacific salmon and two species of sturgeon. There you still could encounter Kaluga, the world's largest sturgeon, which can weigh up to 1,000 kg.



WWF / G. Shalikov



AMUR ECOREGION UNDER HUMAN PRESSURE

During last century the human population increased tenfold and influence on natural ecosystems intensified. The Amur floodplain is densely populated, especially in the Songhua River basin in China where some 100 million people reside. The most important croplands of North China and the Russian Far East are located here.

Conversion of wetlands

During the last 50 years not less than 2.4 million ha of wetlands were lost in Russia, with another 3.8 million ha lost in China.

Conversion of forests

Forest cover has receded from the original 90 % to 47 % in China. On the Zeya-Bureya plains in Russia forest cover declined from 25–60 % to 1–5 %. During the 20th century in Russia agricultural development resulted in the conversion of 3 million hectares of forests into farmlands. Clearcutting in permafrost areas resulted in permanent loss of forest on 2 million hectares because of formation of glade swamp.

Fires

Catastrophic fires annually destroy tremendous expanses of plant communities. In 1996 million hectares of forest were destroyed in China, in 1998 — 3 million hectares in Russia. In Russia grass fires annually burn 3–7 million hectares of wetlands and meadows.

Dam construction

Two major Amur River tributaries in Russia — Zeya and Bureya are already dammed by giant hydropower stations and several large dams have been built on the Songhua River in China. Altogether planners have proposed more than 100 perspective dam sites in the basin, which could in future totally destroy the natural river ecosystem.

Water pollution

The main natural resource of the Amur basin is freshwater, which is becoming more scarce in North-East Asia. The Amur annually discharges 346 cubic kilometers of water into Pacific Ocean. However, currently this water is so polluted, that on many segments of Amur presents serious threat to the health of human population.

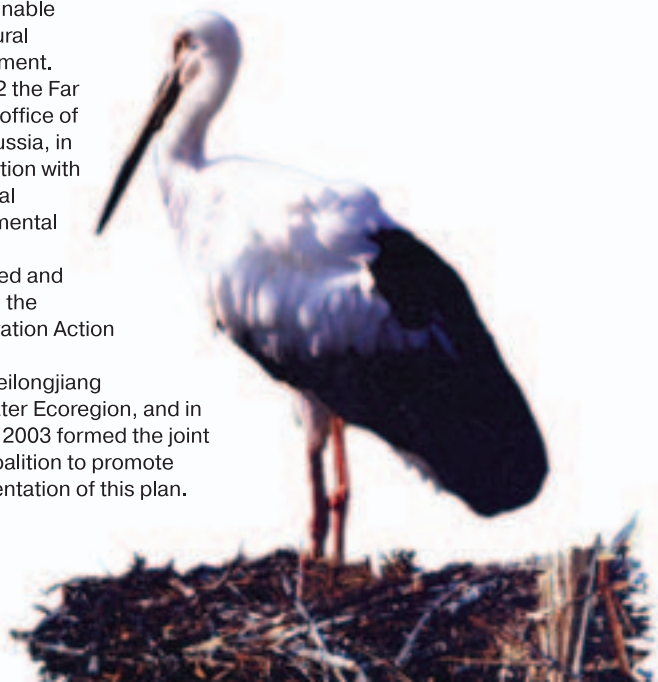
Overexploitation of fish stocks

The record harvest of commercially valuable fish was 100,000 tons of salmon in 1910 and 12,000 tons of sturgeon in 1891. Fisheries has been at the heart of traditional economy of native tribes living along the river. During last 100 years catches have declined by 90 %. However the tremendous fishing potential of the river could be restored if neighbouring countries cooperate on sound international recovery programs.

EMERGING CONSERVATION INITIATIVES

Rapidly worsening environmental conditions in the Amur basin call for urgent development of wider national and international activities. In recent years many conservation initiatives emerged in the region:

- After severe floods of 1998 government of China formulated and started implementation of new natural resource management policy known as the «32 character policy». The policy calls for forest protection and reforestation in river catchments, as well as sustaining natural flood storage capacity of floodplains.
- In 1999 Heilongjiang provincial government legislated a ban on conversion of wetlands.
- In 2000 WWF and IUCN organized an international conference «Amur-2000» that helped to launch several cooperative transboundary projects.
- In 2000–2002 on the Sanjiang plain along the right bank of the Amur River a conservation corridor was developed by linking 5 wetland nature reserves.
- In 2000–2003 Khabarovskii Krai, Evreiskaya Avtonomnaya Oblast, Chitinskaya oblast of Russia signed agreements with Heilongjiang Province and Inner Mongolia Autonomous Region of China on joint monitoring of transboundary pollution in the Amur and Argun Rivers.
- China's National Wetlands Conservation Action Plan, published in 2001, prescribes creation of new protected areas, improving management of wetlands and wetland restoration, development of legal regulations and specific policies for wetland conservation, and improving coordination between governmental agencies.
- In 2002 Amurskaya province of Russia started developing a programme for conservation and ecological restoration of Zeya-Bureya plains — one of the largest of the riverine plains in the Amur basin — that suffered severe environmental losses from unsustainable agricultural development.
- In 2002 the Far Eastern office of WWF-Russia, in cooperation with 7 regional environmental NGOs, developed and adopted the Conservation Action Plan for Amur/Heilongjiang Freshwater Ecoregion, and in January 2003 formed the joint Amur Coalition to promote implementation of this plan.





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- In the Mongolian steppes, at the headwaters of the Amur River, a successful program is underway to preserve free roaming herds of Mongolian gazelle (Dzeren) in and around international Mongolian-Chinese-Russian Dauria nature reserve.
- In 2002 UNEP proposed development of the Amur/Heilongjiang Framework GEF Project to prepare solid technical grounds for meaningful international cooperation.
- In 2003 in Khabarovsk 6 provinces of Russia established a joint Coordination Committee for sustainable development in the Amur Basin, with the aim to develop common policies and programs for environmental management.

Emergence of these many new initiatives demonstrates that we are now at a turning point where we have an unusual opportunity to unite the efforts of all parties involved in the interest of Amur/Heilongjiang integrated river basin management.

INTERNATIONAL GOVERNANCE FRAMEWORK FOR AMUR/HEILONG RIVER BASIN MANAGEMENT

Presently different countries and provinces in the basin lay conflicting claims on dwindling resources of the Amur/Heilongjiang River, but do not have effective mechanisms for coordinating management of diverse river resources.

For example, China is interested in tighter control over exploitation of fish stocks, including those on the Lower Amur. In contrast, Russia is most concerned to control transboundary pollution, and first of all in the Songhuaqing River basin. Close interrelation between these two concerns is quite obvious, and they can be best solved by a cooperative program. However, under the currently separate management regimes for fishing and pollution the two countries have not yet agreed on mutually advantageous joint inspections.

We believe that only comprehensive international governance mechanism can ensure the long-term sustainable well-being of the Amur River ecosystem and diverse human activities taking place in the basin. Therefore we seek to support the establishment of International Integrated River Basin Management Agreement, Programme and an International Council overseeing its implementation.

WWF INVOLVEMENT IN SOLVING AMUR ENVIRONMENTAL PROBLEMS

WWF's top priorities are biodiversity conservation on the basis of a scientific approach and the involvement of all stakeholders in all conservation issues. Therefore the main areas of WWF involvement in the Amur River basin are:

- support close collaboration between China, Mongolia and Russia in transboundary environmental issues based on an integrated river basin management approach;
- focus on biodiversity conservation and sustaining ecosystem processes and functions;
- ecoregion based scientific approach in planning and implementation;
- support creation of international ecological network — Amur Green Belt;
- promote sustainable management of important aquatic bioresources;
- support comprehensive assessment of major development projects and their impacts on the river ecosystem and future of sustainable development in Amur ecoregion.

We seek to cooperate with all agencies and experts, who are ready to work in this direction for the sake of Amur/Heilongjiang River.

OUR VISION FOR THE AMUR BASIN IN 2050

- The natural Amur River ecosystem is biologically rich, and is valued by the human population and countries for its natural qualities and processes, which are considered essential for long-term human survival. Sustainable management of the viable river ecosystem is linked to long-term regional strategies of socio-economic development. The Amur River serves as a powerful symbol of cooperation between peoples of the basin, and international environmental programs are major vehicles of such cooperation.
- The Amur River remains free-flowing and ecological processes function naturally, and Russia, China, and Mongolia collaborate on an Integrated Management Program for the basin. Broad fora of stakeholders pursue their diverse interests through support for integrated river basin management and value their own participation in its formation and further development. Authorities and stakeholders effectively participate in comprehensive assessments of all major development projects and their impacts on the river ecosystem and future of sustainable development in the Amur ecoregion.
- A system of protected areas, linked by the Amur Green Corridor and internationally managed in cooperation with China and Mongolia supports unique stop-over areas for millions of waterfowl along the Northeast Asian Flyway. 30 percent of wetlands are preserved in various types of protected areas, connected by river corridors and stepping stones (an additional one million hectares protected compared to the current level). Vast areas released from strictly guarded border strips receive management regimes retaining their biodiversity value. Green belt of conservation areas expands from Onon to Nikolaevsk-on-Amur, and from Mudanjiang to Khabarovsk.
- Healthy fish populations and secure spawning areas in the Amur River Basin are restored and guaranteed in future by sustainable fishing practices, state enforcement of ecologically sound fishing quotas, water conservation, and reduced pollution from large industries. Indigenous people of the basin have secured access to this resource on which their traditional lifestyles depend.