



FUTURIS XIV "VOLGA"

02:00 MASTER EDIT

ENGLISH SCRIPT

1.00 GENERIQUE

And now the latest research on the Volga River in Futuris.

1.08 (LEAVE SOME MUSIC)

Special fishing nets for a scientific fishing day.

A dozen Russian chemists and biologists meet today onboard the "Akademik Topchiev", the main research vessel at the Institute Papanin (IBIW), the biggest hydrobiological Institute in Russia.

They are sailing along the Volga, the longest river in Europe, in order to better understand the way its ecosystem is evolving in a number of topics, including fish biology, aquatic plants, sedimentology and chemical pollution.

Papanin Institute's nearly 200 researchers feel really passionate about..

1.33 MAP

... the Volga and its 3700 kms of fresh water pouring down from Northwest Russia to the Caspian Sea. Papanin Institute is indeed based at Borok, on the shores of the enormous Rybinsk Reservoir, in the Upper Volga, a river most Russians consider one of the cradles of their civilisation.

1.44 ITW VIKTOR KOMOV, BIOLOGIST AND DEPUTY DIRECTOR, IBIW

"The History of Russia is indeed linked to the Volga, but also to the History of people from other nationalities, like the Tatars, the Udmurts or the Maris who have been living here for centuries. Volga river has been the main road for culture expansion, and also an essential element for the development of industry, transport and agriculture in the whole country".

2.07

Researchers are fishing today for a newcomer in the region. Called "Kilka" by the Russians, the Caspian Small Herring -a template salty water species- has been quietly upstreaming the river and its affluents for decades.



LEAVE SOME NAT SOUND

Now, with global warming heating up Volga´s waters, "Kilka" has become the predominant species in the Upper Volga. Its presence has enriched the food chain, but "Kilka" has brought also new parasites to the region. Global Warming is indeed changing the whole Volga Bassin ecosystem.

2.38 ITW YURI SLYNKO, FISH BIOLOGIST, IBIW.

"Today in the Volga Bassin, and in other rivers around, like the Dniepr or the Don, more than 200 newcomers species have naturalised and now live permanently. This includes fishes, molluscs and new aquatic plants, including even tropical and subtropical species".

3.00

For the last 40 years russian researchers have been studying here the ways whole Volga ecosystems are being challenged both by climate change and chemical pollution.

3.11

At the Institute headquarters, giant aquariums show a glympse of the rich, fragile and ever changing Upper Volga´s biodiversity.

3.30

Sturgeon, for instance, has practically disappeared in the region... (LEAVE SOME MUSIC)

3.37

... while other smaller species have invaded whole areas. (LEAVE SOME MUSIC)

3.46

Yuri Slynko is the head of the Fish Biology Department at the Papanin Institute. In the lab, his team extracts, analyses, and freezes DNA samples from freshly caught "Kilka".

Fish biologists hope genetical models will help them better understand how the species keeps adapting itself to a new -and very changing- environment.

4.11 ITW YURI SLYNKO, FISH BIOLOGIST, IBIW (COMMENCE OFF).

"Our genetic studies of the newcomers allow us to precisely detect where do they come from, to figure out the way they are moving upstream, to see how this species are evolving from historical populations and to analyse the physiological changes that have allowed these spesces to adapt to local environment."

4.36

A fragile river ecosystem in a ever changing environment... Along with climate change, the Volga Basin is under pressure from a number of human activities, industrial waste and chemical pollution being the most challenging.



An example of the risks can be found in Cherepovets, and industrial city near the Rybinsk Reservoir. Several iron and steel plants - as well as shipbuilding, timber and fertilizer factories - line up on the shores of the Sheskna river, one of Volga ´s affluents and the main source of drinking water for Cherepovets´ around 320.000 inhabitants.

4.57

Thought some of them drink water directly from the river... (LEAVE SOME NO COMMENT)

5.05

... most of the drinking water is filtered and cleaned in this treatment plant. A complex mechanical and chemical treatment -including Ultraviolet Ray (UV) exposure- helps to clean the river water and provide safer drinking water.

(LEAVE SOME NAT SOUND)

The plant treats everyday up to 200.000 cubic meters of water, and provides the city with 65.000 cubic meters of drinking water/per day.

5.26 ITW LARISA KIRINA CHIEF TECHNOLOGICAL OFFICER, CHEREPOVETS WATER TREATMENT PLANT

"There is not much of pollution of human origin in the source of water, so our main tasks are to filter the natural colorants out of the water to make it clear enough to drink and to clear out organic components of natural origin".

5.47

Cherepovet ´s big factories are indeed forced by law to recycle their waste water -and they claim they do.

But more needs to be done.

That is why the European Union and Russia are working together in the so called CABRI-VOLGA project.

The project is being coordinated along another long european river: the Rhine.

6.03 TRANSITION (LEAVE SOME 3 SECONDS NO COMMENT)

6.06

It is here in Cologne that German economist Frank Wefering works to strenghten EU-Russian cooperation to reduce environment risk and improve water quality, sustainable development and water management in the Volga Basin.

Rivers, he says, are a crucial factor of European integration.

6.26 ITW FRANK WEFERING, COORDINATOR, CABRI-VOLGA PROJECT (COMMENCE OFF).



"The Volga Basin is also part of the European continent. A good water management in the Volga Basin leads to a better European integration".

6.40

Big rivers flowing through big European cities face similar challenges. Now relatively clean from chemical substances, the Rhine still suffers from urban waste and ecosystem degradation in its banks. Sharing common experiences will be crucial to protect Volga's environment.

7.02 ITW FRANK WEFERING, COORDINATOR, CABRI-VOLGA PROJECT (FIN OFF)

"If you take a look at the Rhine River it was indeed heavily polluted some ten years ago. It took a political willingness but also industry and citizen s willingness to change the situation. We have the same situation in the Volga, and there the Russians can certainly learn by our European experiences".

7.24

And researchers, politicians and environmentalists agree that a key element is education.

7.30 TRANSITION (LEAVE SOME 3 SECONDS)

7.33

Back to Cherepovets in Russia, a warm evening allows students Nikolai, Anna and Olga to swim and play around in the river.

(LEAVE SOME NAT SOUND)

They learn Ecology principles at school, and say they are very much aware of the best ways Volga's waters can be preserved.

(LEAVE NAT SOUND)

7.52 ANNA IGNATIEVA, Student

"It should not be allowed for factories to throw out their waste into the river, nor the waste coming the sewerage system. We need to clean up the river more often".

8.04

Engineer Yaroslav Sennik is the head of the Ecology Department of a Cherepovets' fertiliser company, and also a teacher for Ecology. Today he is meeting Anya and her friends. Volga Basin's survival, he says, will depend on new generations' engagements.

8.19 ITW YAROSLAV SENNIK, HEAD OF ENVIRONMENT DEPARTMENT, AMMOPHOS (FIN OFF)

"Today young people understand how important it is to pay attention to the protection of the environment. Because it's them, their children and grandchildren who will live in



the town and around. They know the importance and they are beginning to understand also that ecological issues can also be profitable from an economic point of view. Anyway, the ecological issues have to be dealt with because that's the demand of the law."

8.50 CONCLUSION

Volga river basin comprises 40% of the population of Russia and nearly half of the country's industry and agriculture. An the country is the custodian to 25 percent of the world's drinkable reserves.

Figures, experts say, that show how important will be both for Russia and the whole European continent to guarantee a better water management along the Volga.

WEBSITES

URL|CABRI-VOLGA.ORG

URL|IBIW.RU

9.10 GENERIQUE FIN

9.15 ENDS