

## **68th Plenary Assembly of the ICPR**

Upon the invitation of the Grand Duchy of Luxembourg, the International Commission for the Protection of the Rhine met for its 68<sup>th</sup> Plenary Assembly in Luxembourg on July 2<sup>nd</sup> and 3<sup>rd</sup> 2002.

"Today the Rhine has returned to be a living water body the state of which has distinctly improved. The biological as well as chemical data of the Rhine which have now been evaluated give impressive evidence of the success of the Rhine Action Programme. With the implementation of the EU framework directive on water policy and the Rhine Programme 2020 the countries in the Rhine basin continue this exemplary transboundary co-operation. In this connection, the EU framework directive on water policy makes additional demands to the co-ordination of river basin management in the entire Rhine basin. Here, in Luxembourg, the countries of the Rhine watershed have voted a new structure and a new organisation of co-operation not least with respect to organisational matters." With these words the new president of the ICPR, the Swiss ex-ambassador Mr. Mathias Krafft opened the press conference on the occasion of this year's ICPR plenary assembly.

### **Conclusion of the Rhine Action Programme**

The Rhine Action Programme triggered off by the consequences of the warehouse fire in Schweizerhalle in 1986 was concluded as scheduled in 2000. The numerous final surveys prove that today the oxygen contents of the Rhine water is sufficient during the whole year and that the largely reduced concentrations of noxious substances have extremely positive effects on the development and propagation of water organisms. Only few substances, such as cadmium, copper, zinc or organic substances as diuron, -

HCH, HCB and PCB are not yet in respect of the target values (see ICPR report no. 123). ICPR surveys

Within the third comprehensive biological inventory along the entire Rhine from the outlet of Lake Constance to the delta area the stock of fish, macroinvertebrates and plankton was surveyed.

Compared to the surveys carried out within the Rhine Action Programme in 1990 and 1995 as well as within the programme "Rhine 2020" the biological inventory in 2000 gave evidence of an impressive regeneration of the bio-coenosis of the Rhine. The great efforts of the Rhine bordering countries targeted at a co-ordinated and committed implementation of the rehabilitation programme for the Rhine have resulted in a very distinct improvement of water quality. The oxygen content is sufficient all year round, the largely reduced concentrations of noxious substances and the improvement of the trophic level indicated by the general reduction of the contents of chlorophyll-a and nutrients have extremely positive effects on the development and distribution of water organisms. The target the Rhine Action Programme fixed for the year 2000, "The ecosystem of the Rhine must become a suitable habitat to allow the return to this great European river of higher species once found here which have since disappeared, such as the salmon" has been reached.

Nevertheless, the biological state of the Rhine is not yet of good quality in every respect. The tendency observed in 1995 is confirmed that, with respect to fish as well as macroinvertebrates, very common species with few ecological needs dominate.

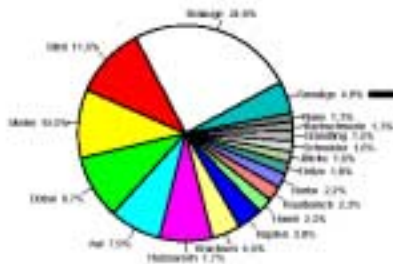
Internationale  
Kommission zum  
Schutz des Rheins

Commission  
Internationale  
pour la Protection  
du Rhin

Internationale  
Commissie ter  
Bescherming van  
de Rijn

Latest news from the International Commission for the Protection of the Rhine

Often recent species, so-called neozoa, dominate the macro-invertebrate population of the river bottom.



On a larger scale, the number of species observed does increase, but, as far as a small-scale examination of reaches and sections of the Rhine is concerned, the number of species locally decreases. These facts seem to indicate that, in particular with respect to habitat structures, the Rhine still presents considerable deficits. This is due to river training which led to a monotonous river bed and a considerable reduction of the dynamics of water flow and bed load. The loss of stretches of freely flowing water resulting from the construction of impoundments, from channel straightening and cutting off of alluvial areas has led to a vast loss of habitats for animal and plant species typical of the Rhine.

Therefore, in order to stabilise these results and to remedy the existing deficits, further measures aimed at improving the habitat structure must be taken. This will be done when implementing the EU framework directive on water policy and the Rhine 2020 programme. The flora and fauna of the Rhine will profit from any ecological revaluation, even on a small scale. On the other hand it may hardly be expected that the species composition of the bio-coenosis will ever be exactly the same as that around 1900. Many of the habitat changes cannot be

reversed and the numerous new species (neozoa) continuously modify the species pattern.

Biological inventories of the Rhine remain necessary to assure a continuous success control. They will be carried on once adapted to the requirements of the EU framework directive. A positive development of the species diversity in the Rhine system may be expected to result from the implementation of the Ecological Master Plan, the planned habitat connectivity, the restoration of the ecological continuity and the combination of ecological measures with those of precautionary flood protection.

In order to assess the contamination of fish of the Rhine, eel and roaches were analysed with respect to about 30 noxious substances. The evaluation of data gave evidence of a contamination with polychlorinated biphenyls and hexachlorobenzene which, in some samples was still problematic with respect to food standards, while the contamination with the other noxious substances analysed was comparably lesser. This corresponds to the findings of the survey carried out in 1995. The contamination with the noxious substances mentioned above are due to residual pollution.

The final reports on the contamination of fish in the Rhine (ICPR-report no. 124), the stock of fish in the Rhine (ICPR report no.127), the macrozoobenthos (ICPR report no. 128) and the plankton of the Rhine (ICPR report no. 129) as well as the summary assessment of the biological inventories (ICPR report no. 130) are available at the ICPR secretariat or through the internet ([www.iksr.org](http://www.iksr.org)).

## Water Fowl

During the winter 1999/2000 about 500 volunteers counted and inventoried water fowl along the entire course of the Rhine between Lake Constance and the outlet of the Rhine into the North Sea. This water fowl census was co-ordinated by the "Schweizerische Vogelwarte Sempach", the "Zentrale für Wasservogelforschung und Feuchtgebietschutz in Deutschland", the "Ligue pour la Protection des Oiseaux délégation Alsace" and the "Office National de la Chase et de la Faune Sauvage" as well as by "SOVON Vogelonderzoek Nederland".

In the Rhine area, an important area for overwintering, a total of 42 species and 2.1 million water fowl was counted. More than half of them were inventoried along the Lower Rhine and in the delta area, a large number was counted around Lake Constance. The detailed report "Waterbirds in the Rhine Valley 1999/2000" was published by the Rijkswaterstaat (RIZA report 2001.042 in English) and is available at the ICPR secretariat.



**Atlas on the risks of inundation and on possible damages due to extreme floods of the Rhine** – this new landmark targeted at raising public awareness and at improving flood-related risk prevention was presented to the press in Koblenz 13<sup>th</sup> March 2002.

The new atlas which is part of the on-going Action Plan on Floods is supposed to make people living along the Rhine aware of their being at risk and of possible damage to material assets due to extreme floods.

The atlas covers the Rhine from the outlet of Lake Constance to the North Sea. It points out possible flood limits and flood depths in case of extreme floods of the Rhine. For any given location the worst case is indicated, as it is never possible to predict where flooding is likely to occur.

The considerable potential damage sums per section of the Rhine (High Rhine: 38 million €, Upper Rhine: 12 billion €, Middle Rhine: 1.7 billion €, Lower Rhine: 20 billion €, Rhine delta 131 billion €) give evidence of the plain economic constraints to act. Measures of non structural flood plain management such as appropriate flood proof construction, flood proofing existing constructions to reduce or prevent damage to individual property, keeping areas adjacent to the Rhine open within the regulations of regional as well as development planning and the creation of flood storage areas must go hand in hand.

The new ICPR Rhine atlas is designed to serve as an incentive to all regions and municipalities along the Rhine to become aware of their own flood risk and to prepare any required precautionary measures with respect to possible extreme floods.

The atlas is available in four languages (Dutch-English-French - German) through internet ([www.iksr.org](http://www.iksr.org)) or as CD-ROM through the ICPR secretariat.

### **Non Structural Flood Plain Management – Measures and their Effectiveness**

This is the title of a catalogue of possible measures designed at limiting flood-related damage the ICPR submitted to its Plenary Assembly.



The report presents general potential measures in the field of forecasting, protection for persons, land use control, flood proofing constructions, flood preparedness and emergency planning and assess them with respect to their effect on reducing the risk of flood damage in different situations. It presents the available means to reduce potential flood-related damage, but it cannot replace detailed vulnerability analysis and its findings as to whether and which additional measures must be taken. The report published in Dutch, English, French and German (ICPR report no. 125) is available at the secretariat of the ICPR or through internet.

### **Implementation of the EU framework directive on water policy**

One of the main points of discussion of the ICPR Plenary Assembly was the implementation of the EU framework directive on water policy in the Rhine basin. As far as the aspects of overriding importance applicable to the Rhine and its complete international watershed are concerned, the ICPR furthers the implementation of this directive. Since large parts of the new ICPR working programme "Rhine 2020" overlap with the contents of the framework directive on water policy, working structures have now been co-ordinated or combined with a view to using existing resources and to avoiding to duplicate work.



### ICPR takes part in scientific press conference

Upon the invitation of the Wissenschafts-Pressekonferenz a representative of the ICPR presented the results of the above mentioned biological inventories of the Rhine in the boathouse of the University of Cologne also accommodating the ecological Rhine laboratory of the university. This press conference was a very welcome opportunity to present the highly encouraging results of on-going Rhine rehabilitation to a wider public. At the same time the excellent co-operation of research institutions with the authorities was demonstrated. The press review gave impressive evidence of the growing interest with which rehabilitation work for the Rhine is met.

### Change in presidency

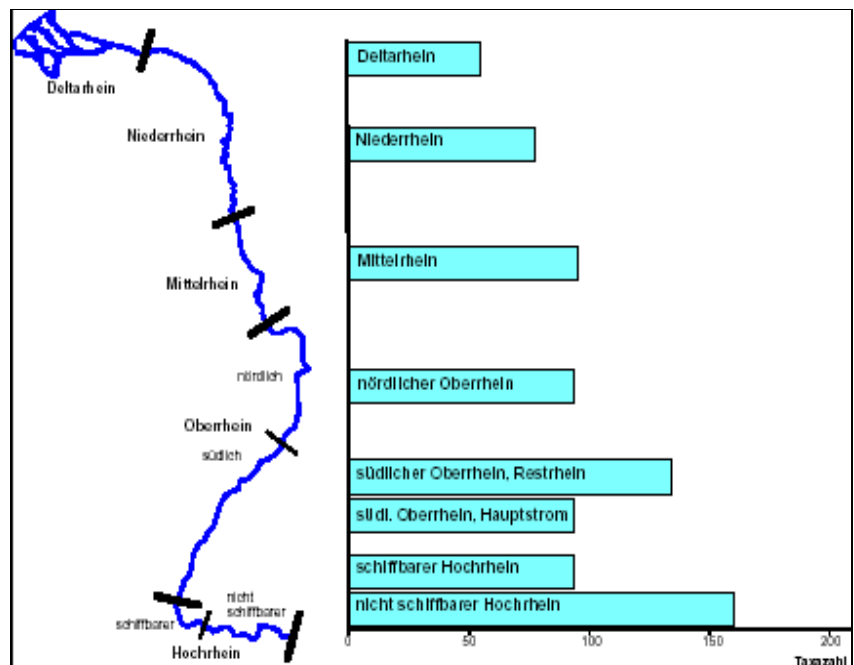
In rotation, Switzerland took over the presidency of the ICPR on 1<sup>st</sup> January 2002 from the Netherlands. Until the end of 2004 the ICPR will now be presided by a specialist in international law, the ex-ambassador Mr. Mathias Krafft.

From 1999 to 2001 Mr. Adriaan Jacobvits de Szeged presided the ICPR. During his term of office the ICPR staged several impressive symposia and workshops on issues of fish migration, flooding and water quality and drafted the "Programme on the sustainable development of the Rhine – Rhine 2020". On this opportunity the ICPR would like to thank him once again for his considerable contributions to positioning the ICPR.

## Recent publications

- 120. Internationaler Warn- und Alarmplan Rhein
- 121. Vergleich des Istzustandes des Rheins 1990 bis 1998 mit den Zielvorgaben
- 122. Vergleich des Istzustandes des Rheins 1990 bis 1999 mit den Zielvorgaben
- 123. Vergleich des Istzustandes des Rheins 1990 bis 2000 mit den Zielvorgaben

- 124. Kontamination von Rheinfischen 2000
- 125. Non structural flood plain management – Measures and their effectiveness
- 126. Atlas of the Rhine 2001
- 127. Rheinfischfauna 2000 – Was lebt zwischen dem Rheinfall bei Schaffhausen und der Nordsee?
- 128. Das Makrozoobenthos des Rheins 2000
- 129. Plankton im Rhein 2000
- 130. Zusammenfassende Bewertung der biologischen Untersuchungen



Number of the macroinvertebrate species along the Rhine river



