# Limnology

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### **Short Historical Account**

The study of limnology has a long tradition in Austria. Already in 1906 a small limnological institute ("Biologische Station Lunz") was established, but even before that event hydrographical and biological attention was given to the country's numerous lakes and rivers (Marsigli, Lorenz Liburnau, Simony and other scientists). However, more than 60 years passed before the first chair of limnology was established at the University of Vienna. This was first located opposite the former residence of Sigmund Freud and was eventually moved to its present site in 1982.

During its first period (1969 - 1982) the department was connected with the limnological Institute of the Austrian Academy of Science and involved in the activities of the International Biological Program (IBP), the Eutrophication Program of the OECD (cordination of the Alpine Project) and Man and Biosphere (UNESCO). Relevant multidisciplinary research was focused mainly on the Neusiedlersee and on the Attersee. Limnology and Paleolimnology of Carinthian lakes and later of the Danube floodplain between Krems and Hainburg became the main targets. During this time it was also possible to encourage the declaration of four sites in Austria as Biosphere Reserves by UNESCO.

#### **Present Activities**

Since its seperation from the Limnological Institute of the Austrian Academy of Sciences (now in Mondsee and Lunz) in 1981 the Limnological Division has become less diversified with respect to its activities, and several fields of former interest such as groundwater ecology and molecular biology of algae are now left to the Academy Institutes. On the other hand the Limnological Division has developed a highly specialized school on fish biology and ecology, including genetics, and is still involved in paleolimnology (onset and causes of meromictic conditions, climatic changes during the Holocene and latest Pleistocene etc.). Moreover, since 1992 the Limnological Division has coordinated (together with the Hydrobotany Division) and participated in the study of the "Marchfeld-Kanal", a 19km artificial river constructed for the recharge of groundwater of Austria's most important agricultureal area, the Marchfeld east of Vienna. Eight different departments are engaged in the investigation and the monitoring of this manmade running-water system since its onset. At present a further main interest concerns the lim nology of the flood plains of the Danube and their restoration.

# Teaching

Apart from training activities concerning the university students (lectures on general limnology and limnochemistry, wetlands, fish biology & ecology, practical general and special courses and excursions), a limnological postgraduate course for Third World countries was initiated by the Limnological Institute in cooperation with UNESCO and the Austrian Government about 20 years ago. Since then more than 200 students have been trained in these courses. Likewise, members of the Limnological Division have been involved in training courses in Chile, Guatemala, Kenya, Zimbawe etc.

# International Cooperations

Due to the Third World cooperation just mentioned and the presidency of the International Limnological Society, world-wide connections have contributed to the variety of programs and projects of the Limnological Division. More recently close relations with the Czech Republic (East-West-Program River Taya), Germany, Great Britain, Hungary, Iran, Japan, Poland have stimulated new ideas and projects.

# Selected References

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