

Project no. **GOCE-CT-2003-505540**

Project acronym: **Euro-limpacs**

Project full name: **Integrated Project to evaluate the Impacts of Global Change on European Freshwater Ecosystems**

Instrument type: **Integrated Project**

Priority name: **Sustainable Development**

Deliverable No. 31 **Design and Population of an Indicator Database for European Freshwater Species**

Due date of deliverable: **Month 12**

Actual submission date: **31/01/2005**

Start date of project: **1 February 2004**

Duration: **5 Years**

Organisation name of lead contractor for this deliverable:
BOKU – Schmidt-Kloiber A., Vogl R., Graf W.
UDE – Lorenz A., Hering D.

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level (tick appropriate box)		
PU	Public	<input checked="" type="checkbox"/> X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

1 About the Indicator Database for European Freshwater Species

As a first step towards an indicator database for European freshwater species a database for macro-invertebrate indicators was developed that will be extended to other freshwater organism groups throughout the duration of the project.

The macro-invertebrate taxa and autecology database presented now under www.freshwaterecology.info is a "living document". It was first set up for the purposes of the EU funded AQEM project (www.aqem.de), which aimed at the development and testing of an integrated assessment system for the ecological quality of rivers throughout Europe using benthic macro-invertebrates. The eight project member countries (Austria, Czech Republic, Germany, Greece, Italy, The Netherlands, Portugal, Sweden) developed a multi-metric assessment system for different stream types, which is applicable through a computer software (AQEM assessment software, to be downloaded at www.aqem.de). As the assessment system requires ecological information on the taxa it was essential to gather information on both, taxa occurrence within the partner countries and ecological information on these taxa for a consistent and reliable database.

The steps towards the autecological database were:

- Selection of experts for the individual taxagroups: acknowledged and approved national and European experts were selected for checking the taxalist regarding species validity, species nomenclature and synonymy (see taxonomic experts).
- Selection of responsible persons for the national checklists: from each partner country one person was selected responsible for gathering the national distribution data of the species; in cases of restricted information availability, only operational taxalists were integrated into the database (see country checklists).
- Compiling the database: the data were compiled into a MS Access database, using the proofed structure of the Austrian computer software ECOPROF (www.ecoprop.at).
- Compiling the autecological information: as a first base ecological classifications from the Fauna Aquatica Austriaca, the Bavarian List and other national existing lists were used; these classifications were amended by some ecological classifications for selected species by project partners and experts.
- The autecological data were number coded using a 10 point or single appointment measurement (depending on the autecological parameter).
- In the succeeding EU funded STAR project (www.eu-star.at) that aimed for the standardisation of river classifications, the AQEM macro-invertebrate taxa and autecology database was extended with national checklists from Denmark, France, Great Britain, Latvia, Poland and Slovakia. Furthermore, additional ecological parameters were included.

The database is now further improved within the EU funded project Euro-limpacs (www.eurolimpacs.ucl.ac.uk). As the project deals with the evaluation of impacts of Climate Change on European freshwater ecosystems, the database will be extended by ecological parameters, which might be sensitive to direct or indirect impacts of Climate Change.

In version 1.0 presented within this deliverable, all macro-invertebrate organism groups are included. At present, the parameters are limited to the distribution of the taxa in the European countries. For detailed query explanations see "How to use the database". The online database will now stepwise be improved by including autecological parameters into the queries.

2 How to use the database

Version 1.0 of the database offers to search for:

- taxagroups
- countries

2.1 Taxagroup

The screenshot shows the 'Macro-invertebrate Taxa and Autecology Database' interface. At the top right is the 'Euro-limpacs' logo. Below it is a sub-header: 'Integrated project to evaluate impacts of global change on European freshwater ecosystems'. The main title 'Macro-invertebrate Taxa and Autecology Database' is centered above a red horizontal line. Above the search area, there are three links: 'About the database', 'Taxonomic experts', and 'About Euro-limpacs'. On the left, there are two blue sidebar boxes: 'Options' (with links to Advanced search and Advanced display values) and 'Help' (with links to How to use the database, Abbreviations, Database administrator). The central search area has a green header 'Search' and a sub-header 'Taxagroup'. It contains a grid of checkboxes for various taxagroups, each with a small thumbnail image to its right. The checkboxes are arranged in four rows: Row 1: Porifera, Coelenterata, Turbellaria; Row 2: Nematomorpha, Nemertini, Gastropoda; Row 3: Bivalvia, Polychaeta, Oligochaeta; Row 4: Hirudinea, Branchiobdellida, Araneae. Below the grid are two more thumbnails of invertebrates. At the bottom of the search area are two buttons: 'Select all' and 'Deselect all'.

Tick the checkbox of the taxagroup(s) you want to have displayed. You can choose more than one up to all ("Select all") taxagroups.

2.2 Country

Country		
<input type="checkbox"/> Austria (AT)	<input type="checkbox"/> Czech Republic (CZ)	<input type="checkbox"/> Denmark (DK)
<input type="checkbox"/> France (FR)	<input type="checkbox"/> Germany (DE)	<input type="checkbox"/> Greece (GR)
<input type="checkbox"/> Italy (IT)	<input type="checkbox"/> Latvia (LV)	<input type="checkbox"/> Netherlands (NL)
<input type="checkbox"/> Poland (PL)	<input type="checkbox"/> Portugal (PT)	<input type="checkbox"/> Slovak Republic (SK)
<input type="checkbox"/> Sweden (SE)	<input type="checkbox"/> United Kingdom (GB)	

Display only taxa occurring in all selected countries

Tick the checkbox of the country (countries) you want to have displayed. You can choose more than one up to all ("Select all") countries.

Option "Display only taxa occurring in all selected countries": displays only these taxa that occur in each of the selected countries.

2.3 Advanced search

Offers the possibility to search for a selected family, subfamily, genus or species. You can either enter the complete taxon ("equals"), the beginning ("begins with") or the ending ("ends with") of the demanded taxon name in the respective field.

You can also search for different identification numbers (ID-AQEM, AQEM/STAR shortcode, DV-Number, TCM-Code, Furse-Code, Perla-Code) by choosing one of them from the selection list.

Higher taxonomic units can be included, excluded or displayed exclusively by choosing the respective option.

Advanced Search

Family	equals	
Subfamily	equals	
Genus	equals	
Species	equals	
ID-AQEM	equals	

- without higher taxonomic units
 include higher taxonomic units
 only higher taxonomic units

2.4 Advanced display values

Author or Shortcode can be displayed by ticking the respective checkbox.

Tick the checkbox of the code that you want to have displayed. You can choose more than one up to all ("Select all") codes.

Advanced Display Values

Shortcode Author

ID-AQEM ID-Ecoprof DV-No
 TCM-Code Furse-Code Perla-Code

Last database update 29.01.2005

Version 1.0 - 26.01.2005

2.5 Results-page

The results page offers a list showing the taxa per country.

The screenshot shows the results page of the Euro-limpacs Macro-invertebrate Taxa and Autecology Database. At the top, there is a logo of green plants and blue waves, followed by the text "Integrated project to evaluate impacts of global change on European freshwater ecosystems" and the "Euro-limpacs" logo. Below this, the title "Macro-invertebrate Taxa and Autecology Database" is displayed in red. A navigation bar with links to "About the database", "Taxonomic experts", and "About Euro-limpacs" is shown. On the left, there are two panels: "Options" (with links to "New search" and "Change search") and "Help" (with links to "How to use the database", "Abbreviations", and "Database administrator"). Below these is a small image of a dragonfly larva. The main content area is titled "Results" and contains a table of taxon distribution across countries. The table has columns for "Taxon" and "Country Codes" (AT, DE, NL, CZ, SK, DK, PL). The data is organized by family: Trichoptera, APATANIIDAE, APATANIIINAE, BERAEIDAE, and Beraea dira, Beraea maurus. The table shows presence (filled cell) or absence (empty cell) of species from each family in each country.

TAXON	AT	DE	NL	CZ	SK	DK	PL
Trichoptera							
APATANIIDAE							
APATANIIINAE							
Apatania auricula		DE					PL
Apatania carpatica				CZ			PL
Apatania eatoniiana		DE					
Apatania fimbriata	AT	DE	NL	CZ	SK		PL
Apatania muliebris helvetica	AT	DE					
Apatania muliebris muliebris		DE		CZ		DK	PL
BERAEIDAE							
Beraea dira	AT						
Beraea maurus	AT	DE	NL	CZ	SK	DK	PL

2.6 Abbreviations used

Country

- AT: Austria
- CZ: Czech Republic
- DE: Germany
- DK: Denmark
- FR: France
- GB: United Kingdom
- GR: Greece
- IT: Italy
- LV: Latvia
- NL: The Netherlands
- PL: Poland
- PT: Portugal
- SK: Slovak Republic
- SE: Sweden

Identification codes

- ID-AQEM: identification number (number code) used within the AQEM and STAR projects
- ID_Ecoprof: identification number (number code) used within the Austrian software ECOPROF (www.ecoprop.at)
- shortcode: 8 letter code used within the AQEM and STAR projects
- DV-Number: German identification number
- TCM-Code: Dutch identification number
- Furse-Code: British identification number
- Perla-Code: Czech identification number

3 Taxonomic Experts

The species/taxa within the macro-invertebrate taxa and autecology database were checked by the following experts regarding species validity, species nomenclature and synonymy.

Taxonomic group	Expert	Organisation	Contact
Turbellaria	Piet Verdonschot	Alterra Green World Research, Wageningen	Piet.Verdonschot@wur.nl
Mollusca	Michal Horsak, Lubos Beran	Masaryk University, Brno	horsak@sci.muni.cz
Oligochaeta	Piet Verdonschot	Alterra Green World Research, Wageningen	Piet.Verdonschot@wur.nl
Polychaeta	Piet Verdonschot	Alterra Green World Research, Wageningen	Piet.Verdonschot@wur.nl
Hirudinea, Branchiobdellida	Hasko Nesemann (Armin Lorenz)	BOKU Vienna	armin.lorenz@uni-essen.de
Hydrachnidia	Tj.H. van den Hoek	Alterra Green World Research, Wageningen	t.h.vandenhoek@wur.nl
Crustacea	Tj.H. van den Hoek	Alterra Green World Reserach, Wageningen	t.h.vandenhoek@wur.nl
Ephemeroptera	Tomas Soldan	Entomological Institute, AS, Ceske Budejovice	soldan@entu.cas.cz
Odonata	Jiri Zeleny	Entomological Institute, AS, Ceske Budejovice	zeleny@entu.cas.cz
Plecoptera	Wolfram Graf	BOKU Vienna	wolfram.graf@boku.ac.at
Heteroptera	Tj.H. van den Hoek	Alterra Green World Research, Wageningen	t.h.vandenhoek@wur.nl
Megaloptera	Tomas Soldan	Entomological Institute, AS, Ceske Budejovice	soldan@entu.cas.cz
Planipennia	Jiri Zeleny	Entomological Institute, AS, Ceske Budejovice	zeleny@entu.cas.cz
Coleoptera	Wolfram Sondermann		wolfram.sondermann@gmx.de
Trichoptera	Wolfram Graf	BOKU Vienna	wolfram.graf@boku.ac.at
Chironomidae	Karel Brabec	Masaryk University, Brno	brabec@sci.muni.cz

Taxonomic group	Expert	Organisation	Contact
Ceratopogonidae	Jan Knoz	Masaryk University, Brno	brabec@sci.muni.cz
Simuliidae	Gunther Seitz Ellen Kiel	Regierung Niederbayern, Landshut Hochschule Vechta	gunther.seitz@reg-nb.bayern.de ellen.kiel@uni-vechta.de
Pediciidae	Herbert Reusch		Herbert.Reusch@t-online.de
Limoniidae	Herbert Reusch		Herbert.Reusch@t-online.de
Tipulidae	Herbert Reusch		Herbert.Reusch@t-online.de
Brachycera	Rudolf Rozkosny	Masaryk University, Brno	rozk@sci.muni.cz

4 Country checklists

The AQEM and STAR partner countries (Austria, Czech Republic, Denmark, France, Germany, Great Britain, Greece, Italy, Latvia, The Netherlands, Poland, Portugal, Slovakia, Sweden) compiled lists of aquatic macro-invertebrates occurring in their countries. This was done using published checklists.

Porifera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Alicja Konopacka (alikon@biol.uni.lodz.pl), Andrzej Kolodziejczyk (kol@hyrdo.biol.uw.edu.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Coelenterata

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Denmark	Jens Skriver jes@dmu.dk	

Country	Responsible person	Literature
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Andrzej Kolodziejczyk kol@hyrdo.biol.uw.edu.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Turbellaria

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Czech Republic	Svetlana Zahradkova zahr@sci.muni.cz	HRABE, S. (Ed.) 1954: Klíč k urcování zvirem CSR. (Key to the Czechoslovak Fauna CSR). Vol. 1. CSAV Praha, 539 pp. OPRAVILLOVA, V., J. VANHARA & I. SUKOP(Eds.) 1999: Aquatic Invertebrates of the Pálava Biosphere Reserve of UNESCO. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biol., 101. 280 pp., unpublished Perla project data
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet tot een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Andrzej Kolodziejczyk kol@hyrdo.biol.uw.edu.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	
United	John Davy-Bowker	

Country	Responsible person	Literature
Kingdom	(jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Nematomorpha, Nemertini

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Grzegorz Tonczyk tonczyk@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Mollusca

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	M. Horsak horsak@sci.muni.cz	JURICKOVA, L., M. HORSAK & L. BERAN 2001: Check-list of the molluscs (Mollusca) of the Czech Republic. Acta Soc. Zool. Bohem., 65: 25-40.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Christian Feld christian.feld@uni-essen.de	GLÖER, P. & C. MEIER-BROOK 1998: Süßwassermollusken. Deutscher Jugendbund für Naturbeobachtungen, 12. ed., Hamburg, 136 pp.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba erba@irsa.cnr.rm.it	MINELLI, A., S. RUFFO & S. LA POSTA (Eds.) 1995: Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe	

Country	Responsible person	Literature
	gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R.REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Andrzej Piechocki piech@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	Swedish Museum of Natural History
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Polychaeta

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Jana Schenkova schenk@sci.muni.cz	ROSOL, J. & F. KUBICEK 1971: K vyskytu sladkovodniho cerva <i>Troglochaetus beranecki</i> Delachaux 1920 (Annelida, Polychaeta, Nerillidae) v Ceskoslovensku. Scripta Fac. Sci. Nat. Ujep. Brun., Biologia 2, 1, 65-74. (in Czech)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R.REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Jacek Sicinski (sicinski@biol.uni.lodz.pl) Andrzej Osowiecki (osa@im.gda.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk)	

	Mike Furse (mtf@ceh.ac.uk)	
--	----------------------------	--

Oligochaeta

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Jana Schenkova schenk@sci.muni.cz	HRABE, S. 1981: Vodni malostetinatci (Oligochaeta) Ceskoslovenska. (Aquatic Oligochaeta of Czechoslovakia.) Acta Univer. Carolin. Biolog.1-2, Praha, 1-167. (In Czech, English summ.); unpublished Perla project data
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Christian Feld christian.feld@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R.REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Elzbieta Dumnicka dumnicka@zbw.pan.krakow.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	Swedish Museum of Natural History
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Hirudinea

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Svetlana Zahradkova zahr@sci.muni.cz	KOSEL, V. 1989: Pijavice (Hirudinea) a ich využitie v bioindikacii saprobity. [Leeches (Hirudinea) and their application in bioindication of saprobity]. In: Hodnoceni bentosu tekoucich vod. MLVD CSR, Praha, 45-60. (In Slovak); unpublished Perla project data
Denmark	Jens Skriver	

	jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba erba@rsa.cnr.rm.it	MINELLI A., O. OMODEO, E. ROTA & B. SAMBUGAR 1995: Anellida Clitellata Aphanoneura. In: MINELLI, A., S. RUFFO & S. LA POSTA (Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Pawel Koperski	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Branchiobdellida

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Elzbieta Dumnicka dumnicka@zbw.pan.krakow.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Araneae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Maciej Bartos	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Hydrachnidia

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet tot een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Crustacea

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Svetlana Zahradkova zahr@sci.muni.cz	OPRAVILLOVA, V., J. VANHARA & I. SUKOP (Eds.) 1999: Aquatic Invertebrates of the Pálava Biosphere Reserve of UNESCO. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biol., 101. 280 pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Daniel Hering daniel.hering@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96; RIEDER, N. 1979: Seltene Krebse in zeitweiligen Gewässern Baden-Württembergs aus der Gruppe der Branchiopoda (Kiemenfußkrebse), zugleich Versuch einer "Roten Liste". (1. Fassung, Stand März 1979). Veröff. Naturschutz Landschaftspflege Bad.-Württ. 49/50, 397-405; PÖCKL, M. 1992: Bestimmungsschlüssel für österreichische Flusskrebse (Klasse Crustacea, Unterklasse Malacostraca, Ordnung Decapoda, Abteilung Astacura). Lauterbornia 10, 1-8; MEIJERING ET AL. 1995 for Central Europe (MEIJERING,P.D., K. JAZDZEWSKI&J. KÖHN 1995: Ecotypes of Amphipoda in Central European Inland Waters. Polskie Archiwum Hydrobiologii 42 (4), 527-536.) all new records of Crustacea taxa published in the journal Lauterbornia (issues 15-35)
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Krzysztof Jazdzewski (kryjaz@biol.uni.lodz.pl) Andrzej Kolodziejczyk (kol@hydro.biol.uw.edu.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Ephemeroptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Tomas Soldan soldan@entu.cas.cz	LANDA V. 1969: Jepice - Ephemeroptera. [Mayflies – Ephemeroptera]. Fauna of Czechoslovakia, Vol. 18, Academia, Praha, 352 pp; SOLDAN, T., S. ZAHRADKOVA, J. HELESIC, L. DUSEK & V. LANDA 1998: Distributional and quantitative patterns of Ephemeroptera and Plecoptera in the Czech Republic: A possibility of long-term environmental changes of aquatic biotopes. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biologia, 98: 1-305; unpublished Perla project data
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Daniel Hering daniel.hering@uni-essen.de	Checklist of German mayflies, compiled by A. Haybach (http://www.ephemeroptera.de);
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Andrea Buffagni buffagni@irsa.cnr.rm.it	BELFIORE, C. 1994: Ephemeroptera. In: MINELLI, A., S. RUFFO & S. LA POSTA(Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna; BUFFAGNI, A., C. BELFIORE, S. ERBA, J.L. KEMP & M. CAZZOLA 2002: A review of Ephemeroptera species distribution in Italy: gains from recent studies and areas for future focus. Atti del X International Conference on Ephemeroptera. 5-11, agosto 2001, Perugia.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Teresa Jazdzewska terjaz@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1996: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 1. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Odonata

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land -

Country	Responsible person	Literature
		und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Jiri Zeleny zeleny@entu.cas.cz	HANEL, L. & J. ZELENÝ 2000: Vazky (Odonata). Vyzkum a ochrana. [Dragonflies (Odonata). Research and Environmental Protection]. ZO CSOP Vlasim: 240 pp. (in Czech)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Peter Rolauffs peter.rolauffs@uni-essen.de	GERKEN, B. & K. STERNBERG 1999: Die Exuvien europäischer Libellen (Insecta, Odonata). Huxaria Druckerei, 354 pp.; JÖDICKE, R. 1992: Die Libellen Deutschlands – Eine Systematische Liste mit Hinweisen auf aktuelle nomenklatorische Probleme. Libellula 11 (3/4), 89-112.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	UTZERI, C. 1994: Odonata. In: MINELLI, A., S. RUFFO & S. LA POSTA(Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Grzegorz Tonczyk tonczyk@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1997: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 2. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Plecoptera

Country	Responsible person	Literature
Austria	Wolfram Graf wolfram.graf@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Jan Helesic helesic@sci.muni.cz	SOLDAN T., S. ZAHRADKOVA, J. HELESIC, L. DUSEK & V. LANDA 1998: Distributional and quantitative patterns of Ephemeroptera and Plecoptera in the Czech Republic: A possibility of long-term environmental changes of aquatic biotopes. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biologia, 98: 1- 305.; unpublished Perla project data
Denmark	Jens Skriver	

Country	Responsible person	Literature
	jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Finland	Aki Rinne arinne@pkt.pp.fi	KALEVI KUUSELA 1996: Updated list of provincial distribution of stoneflies in Finland (Plecoptera). - Sahlbergia Vol 3:76-80, 1996.
Germany	Armin Lorenz armin.lorenz@uni-essen.de	REUSCH, H. & A. WEINZIERL 1999: Regionalisierte Checkliste der aus Deutschland bekannten Steinfliegenarten (Plecoptera). Lauterbornia 37, 87-96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	FOCHETTI, R. 1994: Plecoptera. In: MINELLI, A., S. RUFFO & S. LA POSTA (Eds.): Checklist delle specie della fauna italiana; Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Wojciech Fijalkowski, Andrzej Kownacki (kownacki@zbw.pan.krakow.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1996: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 1. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Heteroptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Svetlana Zahradkova zahr@sci.muni.cz	HRABE, S. (Ed.) 1954: Klic k urovaní zvireny CSR. (Key to the Czechoslovak Fauna CSR). Vol. 1. CSAV Praha, 539 pp.; OPRAVILLOVA, V., J. VANHARA & I. SUKOP(Eds.) 1999: Aquatic Invertebrates of the Pálava Biosphere Reserve of UNESCO. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biol., 101. 280 pp.; unpublished Perla project data
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der

Country	Responsible person	Literature
	armin.lorenz@uni-essen.de	aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Grzegorz Tonczyk tonczyk@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Megaloptera, Planipennia

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Jiri Zeleny zeleny@entu.cas.cz	ROZKOSNY, R. (Ed.) 1980: Klíč vodních larev hmyzu. (The key of insect larvae). Academia, Praha: 521 pp. In Czech.; VANHARA, J. 1970: The taxonomy and faunistics of the Czechoslovakian species of the order Megaloptera. Act. Entomol., Bohem., 67: 133 – 141.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Grzegorz Tonczyk tonczyk@biol.uni.lodz.pl	

Country	Responsible person	Literature
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A. N. (Ed.) 1996: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 1. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Coleoptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Svetlana Zahradkova zahr@sci.muni.cz	JELINEK, J. (Ed.) 1993: Check-list of Czechoslovak Insects IV (Coleoptera). Seznam ceskych brouku. Folia Heyrovskyana, Praha, Suppl. 1, 172 pp; ROZKOSNY, R. (Ed.) 1980. Klic vodnich larev hmyzu. (The key of insect larvae). Academia, Praha: 521 pp. In Czech.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Daniel Hering daniel.hering@uni-essen.de	HESS, M., D. SPITZENBERG, R. BELLSTEDT, U. HECKES, L. HENDRICH & W. SONDERMANN 1999: Artenbestand und Gefährdungssituation der Wasserkäfer Deutschlands (Coleoptera: Hydradephaga, Hydrophiloidea part., Dryopoidea part.; Microsporidae, Hydraenidae, Scirtidae). Naturschutz und Landschaftsplanung 31, 197-211.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	MINELLI, A., S. RUFFO & S. LA POSTA (Eds.) 1995: Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Joanna Pakulnicka (joannap@matman.uwm.edu.pl) Barbara Bis (barbis@biol.uni.lodz.pl) Krzysztof Olszewski	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson	NILSSON, A. N. (Ed.) 1996: Aquatic Insects of North Europe - A

	Lars.Eriksson@ma.slu.se	Taxonomic Handbook, Vol 1. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Hymenoptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Krzysztof Kowalczyk	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Trichoptera

Country	Responsible person	Literature
Austria	Wolfram Graf wolfram.graf@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Petr Komzak broug@sci.muni.cz	CHVOJKA, P. & K. NOVAK 2001: Additions and corrections to the checklist of Trichoptera (Insecta) from the Czech and Slovak Republics. - Acta Mus. Nat. Pragae, Ser. B, Hist. Nat., 56 [2000](3-4): 103-120.; unpublished Perla project data
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Finland	Juha Salokannel juha.salokannel@nic.fi	LAASONNEN, E.M., LAASONNEN, L. & NYBOM, O. 1997: Trichoptera in Finnish biogeographical provinces. - Entomologica Fennica 9: 115-135.; TURUNEN, H. 1998: Hydroptila dampfi Ulmer, Fennoskandialle uusi pikkusirvikäs. Diamina 1998. 1-4. (in Finnish); MALICKY, H. 1999: Neue Köcherfliegen aus Europa, Asien und von Seychellen. - Braueria 26: 44-48; MATTILA, K. & SALMELA, J. 1999: Hydroptila vectis Curtis, Suomelle

Country	Responsible person	Literature
		uusi vesiperhoslaji. Diamina 1999. 1-3. (in Finnish); SALMELA, J. 2000: <i>Allotrichia pallicornis</i> (Eaton) - Suomelle uusi vesiperhonen. Diamina 2000. 5-6. (In Finnish)
Germany	Christian Feld christian.feld@uni-essen.de	ROBERT, B. 2001: Verzeichnis der Köcherfliegen (Trichoptera) Deutschlands. Die Köcherfliegen-Fauna Deutschlands: Ein kommentiertes Verzeichnis mit Verbreitungssangaben.- In: KLAUSNITZER, B. (Ed.): Entomofauna Germanica 5.- Entomologische Nachrichten und Berichte, Beiheft 6, 107-151, Dresden
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	MORETTI, G. & F. CIANFICCONI 1995: Trichoptera In: MINELLI, A., S. RUFFO & S. LA POSTA (Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Janusz Majecki jmajecki@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1996: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 1. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Lepidoptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Poland	Barbara Marciak	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	

Country	Responsible person	Literature
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Diptera

Ceratopogonidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001)
Czech Republic	Jan Knoz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Daniel Hering daniel.hering@uni-essen.de	SZADZIEWSKI ET AL. 1997: Diptera Ceratopogonidae. In: A.N. NILSSON (Ed.): Aquatic Insects of North Europe – A Taxonomic Handbook.- Apollo Books, Stenstrup; HAVELKA, P. & M. AGUILAR 1999: Ceratopogonidae. Studia Dipterologica Suppl. 2, 33-38.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001. Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Ryszard Szadziewski szadz@sat.ocean.univ.gda.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Chironomidae

Country	Responsible person	Literature
Austria	Berthold F.U. Janecek berthold.janecek@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130p.;

Country	Responsible person	Literature
		unpublished data from PhD thesis (Brabec, 1999)
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SAMIETZ, R. 1999: Chironomidae. In: H. SCHUMANN, M. BÄHRMANN & A. STARK (Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). Studia dipterologica Supplement 2, 39-50, Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	BOORMAN, J., M. COLUZZI, C. CONTINI, U. FERRARESE, L. RIVOSECCHI, B. ROSSARO, A. SABATINI & W. RÜDIGER 1995: Diptera Culicomorpha. In: MINELLI, A., S. RUFFO & S. LA POSTA (Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een code ring van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Jacek Sicinski (sicinski@biol.uni.lodz.pl), Andrzej Kownacki (kownacki@zbw.pan.krakow.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson lars.eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1997: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 2. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Limoniidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz	REUSCH, H. 1999: Limoniidae. In: SCHUMANN, H., M. BÄHRMANN &

Country	Responsible person	Literature
	armin.lorenz@uni-essen.de	A. STARK (Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). <i>Studia dipterologica Supplement 2</i> : 55-60, Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Jolanta Wiedenska jwiedenska@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1997: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 2. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Pediciidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	REUSCH, H. 1999: Pediciidae. In: SCHUMANN, H., M. BÄHRMANN & A. STARK (Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). <i>Studia dipterologica Supplement 2</i> , 69-70, Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Jolanta Wiedenska jwiedenska@biol.uni.lodz.pl	

Country	Responsible person	Literature
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A. N. (Ed.) 1997: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 2. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Psychodidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Christian Feld christian.feld@uni-essen.de	WAGNER, R. 1999: Psychodidae. In: SCHUMANN, H. M. BÄHRMANN & A. STARK (Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). Studia dipterologica Supplement 2, 70-73, Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Simuliidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague,

Country	Responsible person	Literature
		130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Daniel Hering daniel.hering@uni-essen.de	ZWICK, H. & D. WERNER 1999: Simuliidae. In: SCHUMANN, H. M. BÄHRMANN & A. STARK (Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). Studia dipterologica Supplement 2: 80-82, Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Italy	Stefania Erba (erba@irsa.cnr.rm.it), Andrea Buffagni (buffagni@irsa.cnr.rm.it)	BOORMAN J., M. COLUZZI, C. CONTINI, U. FERRARESE, L. RIVOSECCHI, B. ROSSARO, A. SABATINI & W. RÜDIGER 1995: Diptera Culicomorpha. In: MINELLI, A., S. RUFFO & S. LA POSTA (Eds.): Checklist delle specie della fauna italiana. Calderoni, Bologna.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Stefan Niesiolowski niesiol@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Tipulidae

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Karel Brabec brabec@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	HEiß, R. 1999: Tipulidae. In: SCHUMANN, H., M. BÄHRMANN & A. STARK(Eds.): Checkliste der Dipteren Deutschlands (Entomofauna Germanica Vol. 2). Studia dipterologica Supplement 2, 83-85,

Country	Responsible person	Literature
		Halle/Saale.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER 2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Jolanta Wiedenska jwiedenska@biol.uni.lodz.pl	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
Sweden	Lars Eriksson Lars.Eriksson@ma.slu.se	NILSSON, A.N. (Ed.) 1997: Aquatic Insects of North Europe - A Taxonomic Handbook, Vol 2. - Apollo Books, Stenstrup.
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Other Diptera

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	Software ECOPROF (MOOG, O., SCHMIDT-KLOIBER, A., VOGL, R. & KOLLER-KREIMEL, V. 2001) MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Czech Republic	Rudolf Rozkosny rozk@sci.muni.cz	CHVALA, M. (Ed.) 1997: Check list of Diptera (Insecta) of the Czech and Slovak Republics. Karolinum-Charles University Press, Prague, 130pp.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	SCHMEDTJE, U. & M. COLLING 1996: Ökologische Typisierung der aquatischen Makrofauna. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft 4/96.
Greece	Konstantinos Gritzalis kgritz@ncmr.gr">kgritz@ncmr.gr	ILLIES, J. 1978: Limnofauna Europaea. Gustav Fischer Verlag, Stuttgart, 552pp.
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
The Netherlands	Piet Verdonschot Piet.Verdonschot@wur.nl	VAN DEN HOEK, T.J.H., P.F.M. VERDONSCHOT, V. KALKMAN & R. REEMER

Country	Responsible person	Literature
		2001: Aanzet to een codering van de Nederlandse Aquatische Macrofauna. Alterra Rapport 411, 86pp.
Poland	Stefan Niesiolowski (niesiol@biol.uni.lodz.pl), Elzbieta Wegner (wegner@robal.miiz.waw.pl), Jolanta Wiedenska (jwieden@biol.uni.lodz.pl), Tadeusz Zatwarnicki (zatwar@robal.miiz.waw.pl)	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	

Bryozoa

Country	Responsible person	Literature
Austria	Otto Moog otto.moog@boku.ac.at	MOOG, O. (Ed.) 1995, 2002: Fauna Aquatica Austriaca, Lieferung 1995, 2002. Wasserwirtschaftskataster, Bundesministerium für Land - und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien.
Denmark	Jens Skriver jes@dmu.dk	
France	Philippe Usseglio-Polatera usseglio@sciences.univ-metz.fr	
Germany	Armin Lorenz armin.lorenz@uni-essen.de	
Latvia	Gunta Springe gspringe@email.lubi.edu.lv	
Slovak Republic	Ferdinand Sporka ferdinand.sporka@savba.sk	
United Kingdom	John Davy-Bowker (jobo@ceh.ac.uk) Mike Furse (mtf@ceh.ac.uk)	