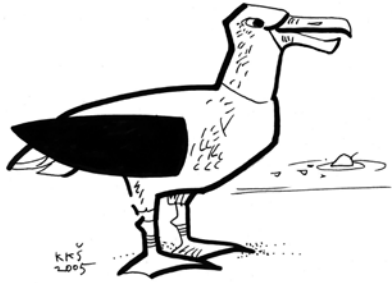


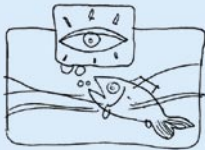
Hello Beaver!
It's good to see you again!
Can you take me and my friends
to the Jolly Rivulet?

Hello Larus Marinus!
Good idea!
I will gladly show you
the Rivulet.



Coalition Clean Baltic

Östra Ågatan 53, SE-753 22 Uppsala, Sweden
E-mail: secretariat@ccb.se • Internet: www.ccb.se

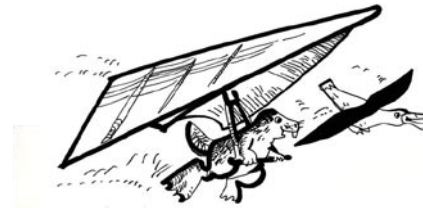


River Watch

How to view this CD-ROM?

Insert the disk into the
CD-ROM drive and the
presentation should start
automatically. Otherwise,
manually launch file
"RiverWatch.exe".

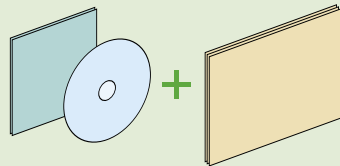
© CCB, 2005



River Watch



Notes:



CCB RiverWatch
CD-ROM

RiverWatch **workbook**
(28 pages), printable from
the CD-ROM application



River Watch

Within this CD-ROM there are
**12 key events, each with one
dialogue, one landscape scene
and two tasks.** Thus a total of
24 tasks are presented to the
viewer. All parts form one logical
sequence of events – showing
how river environment is
influenced by human activities,
among other things. The tasks
can easily be printed and
bound – thus becoming a useful
workbook for children, serving as
a trip diary and a creative pad.



CCB RiverWatch CD-ROM: a journey along Jolly Rivulet

Complete with hand-made drawings, easy-to-read diagrams, informative texts, dialogues, creative and cognitive tasks, this CCB CD-ROM is an attempt to make RiverWatch activities attractive, accessible and enjoyable to children. Focusing on the Baltic Sea Region, the CD-ROM introduces certain environment-related notions and ideas – for a better understanding of the space we live in. This excursion guide for the study of Baltic Sea rivers is suitable for secondary schools.



Jolly Rivulet is an imaginary stream, a tributary to a bigger river, which flows into the Baltic Sea. **Larus Marinus** and **Beaver**, already known to the readers of the CCB Newsletter, are excursion leaders to the Jolly Rivulet. Twelve stops are made along the virtual tour. At each stop an introductory dialogue is followed by a landscape scene. With each panorama two tasks are presented to the viewer: a *cognitive task*, marked with , and a *creative task*, marked with .

This is my home on the Rivulet. But you find Beaver's source and follow its stream from the beginning!

1

The valley here is so picturesque! It makes me feel like a butterfly, gliding from one side to the other!



2

No time for fishing for most of the day! The economy perhaps has to be...



3

Organic materials and nutrients will make the water...
Disinfectants are making my skin sore!

4



Let's swim across those six ponds on the Rivulet. The first pond is called Muddy, and the last one is known as Shiny. You will soon understand why they were given such names!

5



Fishermen and tourists like to stay in this beautiful valley in one of the rivulet's deep places there lives a big fish, which sometimes likes to show off a bit.

Wow! A huge pike!



6

The farmer who lives here is really taking care of the environment... just like me!

7

Your kids like your cat!

8

Scientific task
CCB Newsletter © 2016
Printed on demand

Water quality measurements.
Water Quality Class I.

Clean water (colour in water quality map is sky-blue).
Low amount of nutrients. Plenty populated waters, mainly with algae, mosses, larvae of intolerant insect species. Very low amount of bacterium adequate to demands of drinkable water. Spawning place for valuable fish.
Transparency: 5 meters and more.
Oxygen saturation level: 100%.

Introducing the species

Mayflies (order Plecoptera)
These insects have aquatic nymphs, which transform directly into winged adults. The nymphs are generally robust, both the head and top surface of the 1st three body segments (thorax segments) are hardened (sclerotized). All species have two (never more) tail filaments (cerci). Small stoneflies may be mistaken for mayflies, but mayflies usually have three tail filaments. Stoneflies also have two tarsal claws at the end of their legs while mayflies have only one. Stoneflies nymphs tends to inhabit clear, cold fast running water, with high dissolved oxygen content, though they are found in other waters in fewer numbers. Because of high water quality requirements of the stonefly nymphs they are effective use as biological indicators of environmental degradation.

Stonflies (order Plecoptera)
These insects have aquatic nymphs, which transform directly into winged adults. The nymphs are generally robust, both the head and top surface of the 1st three body segments (thorax segments) are hardened (sclerotized). All species have two (never more) tail filaments (cerci). Small stoneflies may be mistaken for mayflies, but mayflies usually have three tail filaments. Stoneflies also have two tarsal claws at the end of their legs while mayflies have only one. Stoneflies nymphs tends to inhabit clear, cold fast running water, with high dissolved oxygen content, though they are found in other waters in fewer numbers. Because of high water quality requirements of the stonefly nymphs they are effective use as biological indicators of environmental degradation.



Flat worms (class Turbellaria)
The turbellarian body is elongated, relatively soft, and usually tapered at the ends. Freshwater turbellarians are free-living animals, usually found in clean waters on the bottom of rocks or on leaf litter (organic debris). All flatworms are predatory and feed predominantly on larger invertebrates. Several invertebrates and vertebrates can consume flatworms.

Mayflies (Heptagenia sp.)
Ephemeroptera

Stonflies (Perlodes sp.)
Plecoptera

Flat worms (Turbellaria)
(Polyclis sp.)

(Euplanaria sp.)

An example of a cognitive task page.

 An example of a creative task.



Hello Salmon!



Hi Larus Marinus! What are you doing here, so far away from the sea?

There are millions of inhabitants in our Rivulet! Look how many of them are just under this one stone!

9



It's an amazing world, full of life!

10


I can see so many rivers and rivulets! Now I understand an important thing!

There's the Baltic Sea! So many rivers and rivulets flow into it! I also have an idea.

11

There's the Baltic Sea! So many rivers and rivulets flow into it! I also have an idea.

12