

Mixed Pond Life-Primary Schools

We supply:

- Living materials
- Culture media
- Frozen materials
- Preserved materials
- Skeletons
- Microscopes
- Wall charts
- Stains and Indicators
- Seeds
- Books
- Chemistry Models
- Anatomical Models
- Earth Science
- Environmental
- Forensic Equipment

and lots more on our website

www.southernbiological.com

As soon as you receive your mixed pond life culture, remove the lid and gently swirl the contents to replace some of the oxygen consumed by the organisms in transit. In your culture, you will find examples of macroscopic (visible with the naked eye) and microscopic (visible with the aid of a microscope) organisms along with several specimens of pond weed. These organisms have been obtained from our ponds, and vary each time you place an order, in accordance with availability and season.

Microscopic Examination:

Allow the solution to settle, then use a plastic pipette to obtain a sample of water from the bottom of your culture. Add 1 drop of the culture, to one drop of “Protoslo” or methyl cellulose solution on a microscope slide and mix gently. Add a coverslip and examine under low power using maximum contrast, i.e. with the iris diaphragm almost closed. Locate and center organisms before swinging to high power. Microscopic specimens likely to be present include: Amoeba, Paramecium, Euglena, Rotifers, Stentor, Chlorella, Chlamydomonas, segmented worms, together with other varieties of green and blue-green algae.

To maintain the microscopic organisms for some weeks, transfer them to a glass petri dish containing 2-3 grains of uncooked rice. Store in a dark cupboard at room temperature. Alternatively, if you wish to maximise growth of algae, store a petri dish on a laboratory bench in indirect light at room temperature.

Macroscopic Examination:

To obtain maximum value from your culture, we suggest you tip approximately three quarters into a larger vessel such as a small empty white ice-cream or margarine container for macroscopic examination. Retain the smaller portion for direct microscopic examination. Don't forget to check for organisms which remain adhering to the sides and bottom of the original container such as leeches and planaria. Macroscopic specimens possibly present include; Aquatic worms, Planaria (flat worms), Ostracods, Backswimmers, Mosquito larvae, Daphnia, Leeches, Damselfly Nymphs. Pond Weed species: Duckweed, Azolla, Spirogyra. Should you wish to try to maintain some of the macroscopic organisms present in this culture, add the contents to an already established small fresh water aquarium maintained at room temperature in indirect light containing no fish, tadpoles, etc. Because of natural competitive pressures, and water chemical content, not all organisms present in the culture will survive. Dilution factors can also make it difficult for small organisms to be located. Remember, sampling from the bottom sludge will increase your chances of finding organisms.

Catalogue Code: L 4.20

Supporting Products for Mixed Pond Life:

Laminated Charts:

Code: WC32 Pond I, Smaller Microlife
Code: WC 33 Pond II, Larger Microlife
Code: WC 34 Pond III, photosynthetic Microlife

Books:

Code: BK54.10 Freshwater Invertebrates
Code: BK54.11 Colour Guide to Invertebrates of Australia Inland Water
Code: BK54.12 Ponding
Code: BK54.13 Australian Guide to Pond Life

Plus

Full range of Aquarium accessories

Microscope Accessories

Code: M7.15 Microscope Slides, Box of 100

Code: M7.11 Coverslips, glass, 22mm square

Code: M7.70 Deep Well Slide
Code: M7.80 Easy View Slides
Code: M7.81 Easy View Holder
Code: M7.82 Easy View Rack

Code:
MC11.0 Protoslo, 15mls

Biosets

BIOS 12 Pond Life

See our catalogue for more.

Ref: L 4.20 20/03/09

MIXED POND LIFE ILLUSTRATIVE GUIDE

Many, but not all of the organisms illustrated below could be present in your Mixed Pond Life. The culture will vary according to what is available at different times of the year.

It is important to note that these diagrams are not to scale. We have provided some size indications with each illustration.

For more detailed illustrations we recommend several reference books. Some of these are listed on the front of this handout. A comprehensive list can be found in our main catalogue

MACROSCOPIC - Visible with the eye

					
Pond Snail (1x - 3x)	Ramshorn Snail (1x - 3x)	Tubifex (1x)	Hydra (3x - 4x)	Mosquito larva (2x)	Damselfly nymph (1x - 2x)
					
Gammarus (amphipod) (2x - 4x)	Ostracod (10x - 12x)	Daphnia (4x - 8x)	Planarian (2x - 4x)	Leech (1x - 3x)	Backswimmer (1x - 2x)

MICROSCOPIC—Visible with the aid of a microscope

				
Amoeba (0.8 - 1.0mm)	Paramecium (0.1 - 0.2mm)	Stentor (0.5 - 0.8mm)	Euglena (0.02 - 0.1mm)	Rotifer (0.1 - 0.2mm)
				
Spirogyra (filamentous)	Spirostomum (0.2 - 0.3mm)	Vinegar Eel (1 - 3mm)	Volvox (0.5 - 2mm)	Chlamydomonas (0.01 - 0.02mm)

Note: Several of these organisms can be purchased as pure dense cultures. The cultures available in pure form are listed in our main catalogue.