# Zooplankton and Algae in Lake Wanaka

## Zooplankton

Zooplankton come in a huge range of sizes; some are visible to the naked eye and others are microscopic. They are mostly grazers that eat algae and are a vital part of freshwater food chains.

## **Water Fleas - Cladocerans**

Some of the largest zooplankton found in Lake Wanaka, cladocerans reproduce asexually (clones) and range in size: *Daphnia pulex* 3mm, *Ceriodaphnia dubia* Imm, *Bosmina meridionalis* 0.5mm.



Daphnia



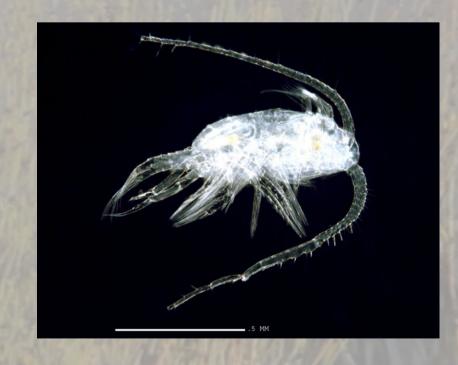
Ceriodaphnia



Bosmina

# Copepods

Reproducing sexually, Boeckella dilatata range in size: females 1.3mm and males 0.9mm



Boeckella

## Rotifers

Often termed 'wheel animals', they show bilateral symmetry and range in size from 0.1-0.5mm.



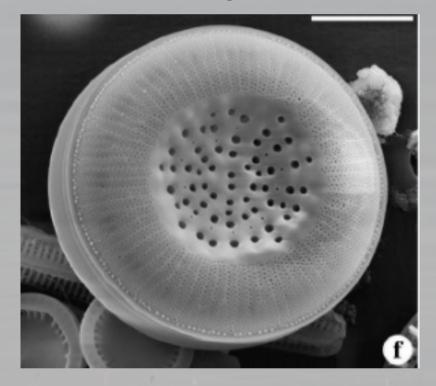
Rotifer

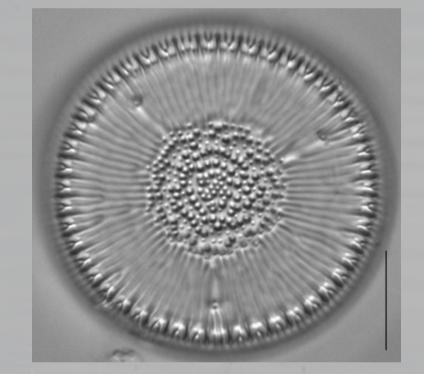
# Algae (Phytoplankton)

Phytoplantkon are usually only visible under a microscope, unless individual cells clump together. They can live as single cells or as long strings. Phytoplankton convert sunlight and carbon dioxide into food, with oxygen as the by-product.

## Lindavia or Lake Snow

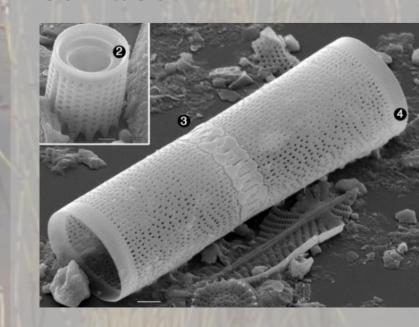
Lake snow is an aggregation of *Lindavia intermedia*, a single celled diatom that is joined into clumps by mucous. The mucous makes Lake Snow very sticky, but it is non-toxic, both to humans and pets. It can spread fast as only one cell can start a new bloom.

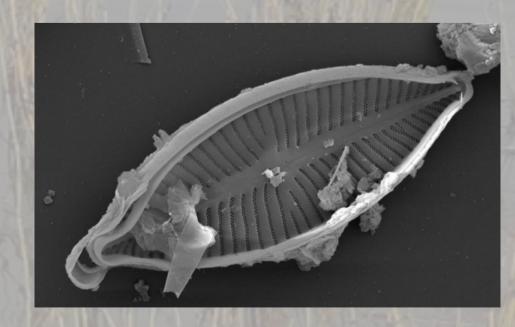




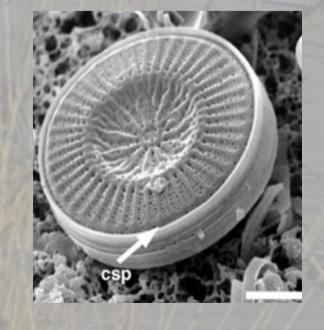
#### **Other Diatoms**

Diatoms have distinctive transparent cell walls made of silica, like glass, and are often termed 'algae in glass houses'. Consisting of two halves called valves, they have elaborate perforation patterns on the surface.





Navicula



Cyclotella

Aulacoseira

OTÂGO

Background photo courtesy of Marc Schallenberg

