# Taking a Diatom Herbarium into the Digital Age

# Christopher S. Lobban

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20 µm

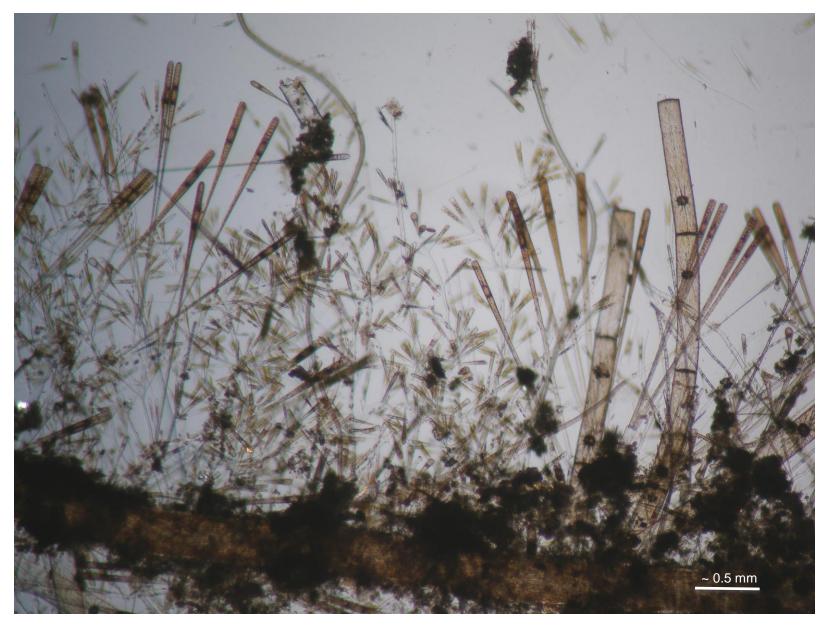
ø 5100x ∢‡ 52.6μm JAN 02 2013 16:22 GU44AR-1\_st344

## Herbarium material includes preserved community samples,...



Farmer fish (Stegastes nigricans) with its diatom-coated algal turf "farm"

## ... permanent mounts on slides, and SEM stubs.



Detail of diatom coating on a seaweed filament.

## Samples are digested in acid to remove organic matter.



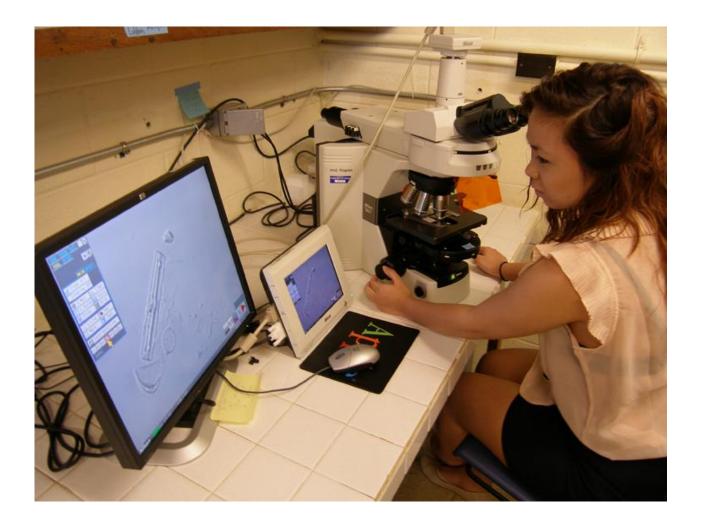


Diatom collection presently comprises 750 raw samples, 1,400 slides, 500 SEM stubs and 74,000 images.

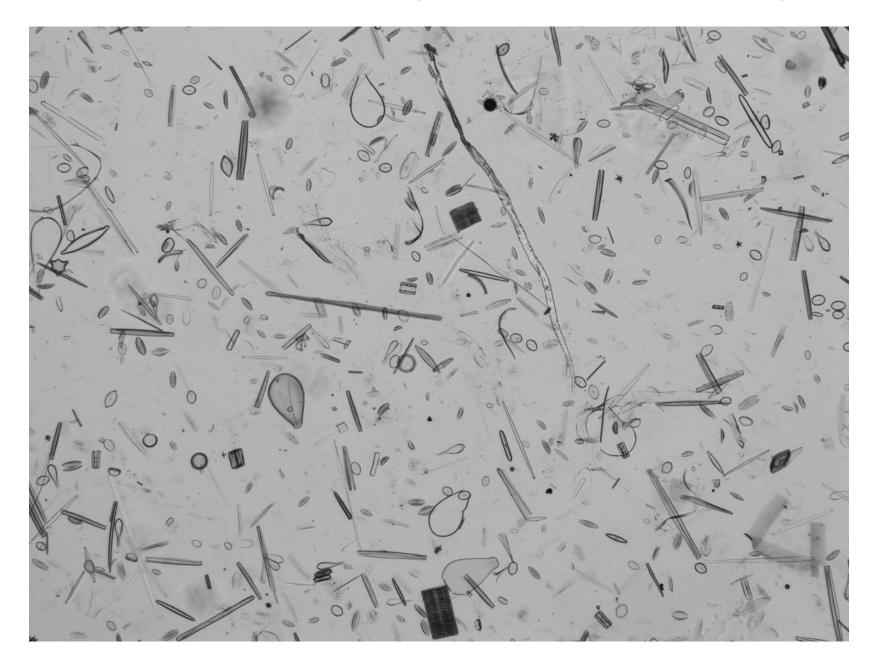


LM room of the Microscopy Teaching & Research Lab, CNAS, UOG.

Most imaging done with differential interference contrast (DIC) on Nikon 80i microscope.



## Each slide has thousands of specimens and scores of species.



An imaged individual becomes a herbarium specimen.

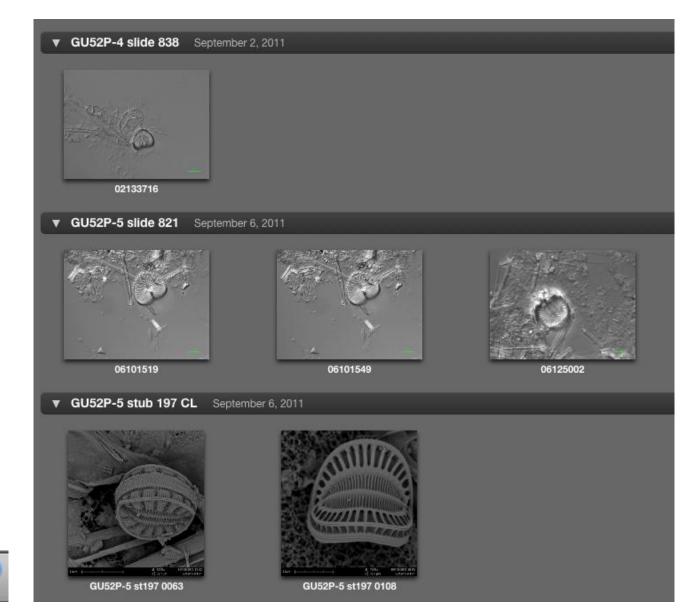
One specimen > 1 image; one image > 1 specimen.

different specimens

same specimen



I will use Specify to be able to display records by species, genus, sample, etc.



iPhoto!

Q- campyl 😒 Search ProtistCentral

# Selected images so far displayed on static website

ProtistCentral> Western Pacific Diatoms Project

http://www.protistcentral.org/index.p hp/Project/get/project\_id/17



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Taxa ::

subkingdom Stramenopiles > phylum Bacillariophyta > class Coscinodiscophyceae > subclass Chaetocerotophycidae > order Chaetocerotales > family Chaetocerotaceae > genus Chaetoceros >

### Chaetoceros Guam-sp.3

Identification

There is no identification information available for Chaetoceros Guam-sp.3.

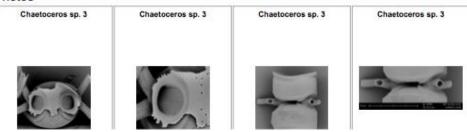
### Projects This is Associated With

Western Pacific Diatoms Project

### Last Updated

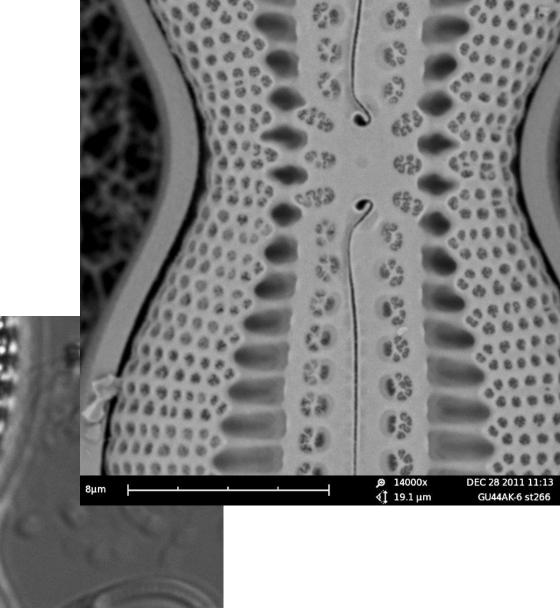
Added by Chris Lobban on June 12, 2013, 11:17 am Last edited by Chris Lobban on June 12, 2013, 11:17 am

#### Photos



http://www.protistcentral.org/Taxa/get/taxa\_id/585879

## Thank you.



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