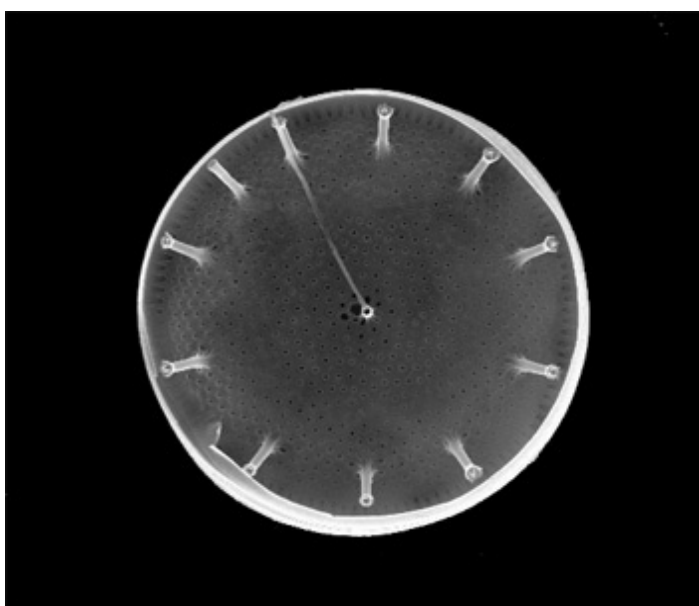


Ukens bilde



Our environmental clock is at 11:55!

Photographer: Egil Sev. Erichsen

Chief engineer Laboratory for Electron Microscopy, Egil Sev. Erichsen sends us this picture of a diatom collected by **Mikal Heldal** from the **Marine Microbiology** research group. Mikal thinks that it might be *Thalassiosira* sp.

Here an environmental sample mirrors the time on the theoretic environmental clock – and it clearly shows that time is running out!

You are invited to submit photos (electronically!) for "Ukens bilde". Please include a very short description and credit information. Picture can be of researchers / students in action, technology, organisms, field sites ... Please send your pictures to [Elinor Bartle](#)

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Siste nytt fra BIO

Viktig eksterntweb-tips, flere gode BIO-seminarer m.m.

Et klimaspørsmål?

Stipendiat Anders Frugård Opdal snakker om det industrielle fiskeriets effekter på fiskebestandene som neglisjeres av fiskeriforvaltningen i en kronikk i [På Høyden](#). * Kronikken sto først på trykk i Klassekampen 17. februar 2010

Kan ha svar på drittproblem

Gunnar Bratbak sier at "no håpar sunnfjordingane at stinkbomba forsvinn". Les mer fra [Firda.no](#)



BIO-seminar

Husk BIO-seminar mandag 15. mars kl 1300 i store auditorium, HIB (datablokka): Per Magnus Jørgensen: "Hans Strøm, Norges første moderne biolog" (Hans Strøms hus er foreslått som navn på BIOs nye hus)"

MRM-seminar på BIO

18. mars kl. 1215-14 holdes det MRM seminar på BIO i B-blokken, rom K4. MRM er en MS-basert metodikk der man kan kvantitere mengde av bestemte protein og dets isoformer. En metodikk som nå kan kjøres på PROBE og som sannsynligvis er aktuell for svært mange forskningsgrupper på BIO. Les mer om seminaret [her](#)

Algeseminar på BIO

Mandag 22. mars (09-11) blir det holdt et seminar om algeklassen Haptophyceae i Auditorium 3 på Realfagsbygget.

Haptophyceae er en klasse mikroalger med stor utbredelse i det marine miljø. Klassen har flere arter som kan danne oppblomstinger som er giftige for fisk(f.eks. *Chrysocromulina polylepis*). Coccolitophorider eller kalkflagellater inngår også i denne klassen. Mest kjent er *Emiliana huxleyi* som danner grønn/melkeaktig sjø på forsommerne hos oss. Kalkflagellatene har og fått mye oppmerksomhet i forbindelse med forsuring av havet. Se program [her](#).

External web tips of the week

It is great to see more and more people getting involved with the External Web (EW) pages. It is truly a democratic tool. However, there are some crucial tips ...

The **first** is use the browser Firefox when you are editing (for some reason, the content management tool works best in this browser and not so well in the others).

```
SEMINAR

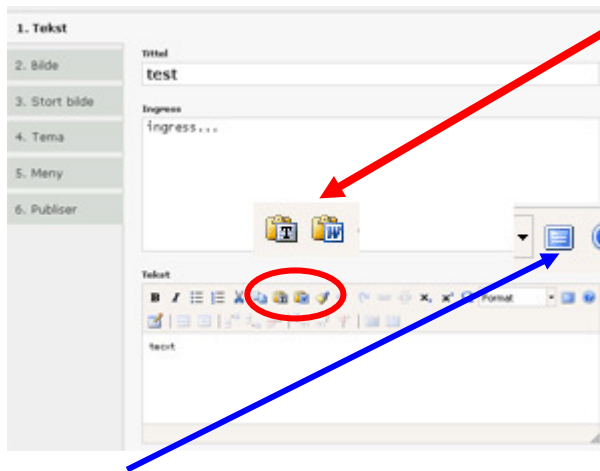
Strøm, Norges første moderne biolog

<!-- /* Style Definitions */ p.MsoNormal,
li.MsoNormal, div.MsoNormal {mso-style-
parent:""; margin-top:0mm; margin-right:0mm;
margin-bottom:6.0pt; margin-left:0mm; mso-
pagination:widow-orphan; font-size:10.0pt; mso-
bidi-font-size:12.0pt; font-family:Arial; mso-
```

The **second** is, although we say "just copy and paste" in reality you CANNOT just copy and paste from WORD. (Thanks Jarl for sending us this [spectacular example](#)) Microsoft includes all kinds of hidden layout codes that suddenly become visible to browser readers. In most of the fields the text must be "washed" first.

BIO-info

Nyheter fra Institutt for biologi



The tool gives you two “washing” options T and W. (I have blown them up for better visibility) You will have to try for yourself to see which works best. My experience is that there will always be some reformatting of the text necessary – dependent on how much formatting was present in the original text. I sometimes use T and sometimes W.

SO cut and paste means: select your text, copy, click on one of these buttons, THEN paste in the little window that opens up, then click on insert. (you do NOT have to do this in the title and ingress fields)

I have highlighted another button in this editing window. This button enlarges the window so you

can see what you are doing more easily. Just click on it a second time to shrink it back to small.

My **third** valuable tip is the most important html / web tip I have ever learned:

When working with text in web, when you click the “enter” key, by default you get a double space. If you would only like a single space (what is “normal” in word processing programmes) you must click shift + enter.

Elinor Bartle

Ventilation in the new building

Repeating the information given in Norwegian last week from Ståle Kolbeison:

Ventilation in the new building operates as following: in the offices only M-F 05:30-19:00 and in the labs 24/7.

Plastic wrap to be sorted

Repeating the message from Evy last week. BIO will be part of a pilot project testing sorting out plastic wrap waste. Plastic wrap is defined as soft plastic and bubble plastic – ie the kind of plastic wrap used in shipping. Technical staff in each research group will be responsible for developing a routine for gathering in the wrap.

Siste nytt fra STIM

STIM has a new board!

STIM is proud to announce a new board consisting of **Christine Elgen** as President, **Johanna Fall** as Vice President and **Sigfrid Tangen** as Treasurer. We wish them luck and look forward to seeing and supporting their good work. At the same time we would like to thank the outgoing board for their hard work which includes **Kristine Wilson, Sofia Fortunato, Christian Irgens, Annette Bernhard, Cindy Pedrosa and Øydis Alme**.

There is still room for more involvement of students, especially more master and PhD students. So far, STIM has the help and wisdom of PhD student **Puja Gupta** and would like to invite others. **Cindy Pedrosa**, Social Events & Waffler, Cindy.Pedrosa@student.uib.no
Eric Leiser, Media, Resigned after graduation in fall 2009

Foto: Kristine Wilson (From left to right: Johanna Fall, Christine Elgen, and Sigfrid Tangen)



Siste nytt fra verden rundt oss

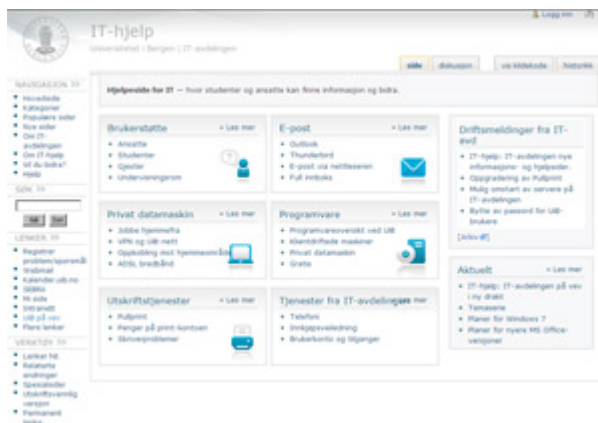
UiBs IT-tjenester, publisering i 2009, biofagevaluering mm

Profesjonalisering av IT-tjenester

IT-avdelingen leverer et bredt spekter av IKT-tjenester, og har ansvar for infrastruktur, applikasjoner og brukerstøtte.

ITA har tatt i bruk Information Technology Infrastructure Library (ITIL) på viktige områder. ITIL er et rammeverk for god IT-drift og brukerstøtte og er en samling beste praksis for ulike deler av en ITAs prosesser. ITIL etablerer også en felles terminologi for profesjonell IT-drift.

Først ut på UiBs ITA var funksjonen Service Desk, som førte til etableringen av brukerstøttesenteret BRITA. Senere har ITA fått bedre kontroll og rutiner for blant annet håndtering av konfigurasjon og endringer. Samspillet mellom de ulike prosessene er også vesentlig, og det hele er en kontinuerlig prosess. Lær mer på [IT-avdelingens portal](#) for IT-brukere ved UiB



Professional IT management and support

The IT department's responsibilities cover infrastructure, applications and user support. Information Technology Infrastructure Library (ITIL) is a set of concepts and policies for managing information technology (IT) infrastructure, development and operations. The IT department first introduced ITIL to the service desk, BRITA. Subsequently improvements have been made in routines such as configuration and change management. Interaction between different processes is vital, as is continuous development and adjustment. More information is available on the IT department's portal for UiB users, it.uib.no.

[IT portal for UiB-bruker](#) / IT portal for UiB users ([English](#))

Responsible for organising a conference

Bergen's Chamber of Commerce has organized a service to help simplify the task of organizing a conference for businesses (and researchers!) in Bergen. [Learn more](#).

Mindre uttelling for mer forskning

Forskerne ved UiB har produsert 7 prosent flere publikasjonspoeng i 2009 enn året før. Likevel utgjør dette en svak nedgang i nasjonal andel fra året før. Les mer fra [På Høyden](#)

Publikasjonspoeng for 2009

Nå foreligger oversikten over publikasjonspoeng for 2009 på NSD sin hjemmeside. [Les mer](#).



Pris til unge forskere

Sveinung Sandberg (32) og Daniel Lokshtanov (26) mottok i går Meltzerprisen for yngre forskere. Sandberg for forskning i gatebaserte rusmiljøer, Lokshtanov æres for datareduksjon som hjelpemiddel. Les mer fra [På Høyden](#)

Meltzerprisen til Drange og Brekke

Professor Helge Drange og professor emeritus Nils Georg Brekke mottok i går Meltzerprisen for fremragende forskningsformidling. Sveinung Sandberg (32) og Daniel Lokshtanov (26) fikk Meltzerprisen for yngre forskere. Les mer fra [På Høyden](#)

BIO-info

Nyheter fra Institutt for biologi

Ny fagevaluering er i gang

De to neste årene skal forskningen innenfor biofagene, medisin og helsefag evalueres i én stor, samlet evaluering. Fagevalueringen blir den mest omfattende i Forskningsrådets historie. BIO skal levere egenvurdering høsten 2010. [Les mer](#)



Dialogmøte om bioteknologisk næringsutvikling

Forskningsrådet inviterer næringsaktører til åpent møte om satsingsområder for bioteknologisk forskning og verdiskaping.

[Les mer](#)



Åpent seminar om framtidige behov for e-Infrastruktur for norsk forskning

Møtet er rettet mot forskere fra en rekke forskjellige fagfelt i naturvitenskap, samfunnsvitenskap og humaniora, samt Forskningsrådets administrasjon.

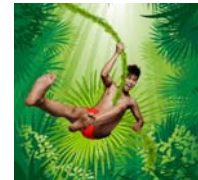
[Les mer](#)

Junglebook tickets available

The story about Mowgli is back and now on Norwegians at the Nationale Scene

Date: 16.april Time: 17.00 Place: Store Scene UiB price: 100,- p. stk.(max.6)

[Learn more.](#)



Ledige stillinger for biologer

Stillinger utlyst på UiB (herunder stillinger på BIO) finner du [her](#).

15.03	PhD Molecular Ecology , Bodø University College, Norway
15.03	PhD position : Geology/Geography/Biology, Dept. of Geosciences & Geography, Univ. Helsinki, Finland
15.03	Sommerjobb Arboretetet og Botanisk Hage på Milde
15.03	Researcher/postdoc in sea ice physics and oceanography at the Norwegian Polar Institute (NPI)
17.03	PhD positions at Institute of Biology, Syddansk Universitetet (five fellowships are offered within the topics Environmental Stress and Aquatic Ecology)
17.03	PhD position , University of Southern Denmark, in environmental microbiology
22.03	Post doc innen marine alger og primærproduksjon i isfylte farvann, Norsk polarinstitutt
26.03	Project Officer with the International Project Office of the Surface Ocean- Lower Atmosphere Study (SOLAS).
30.03	Full professor in Biological Oceanography at IFM-GEOMAR in Kiel, Germany. More
31.03	Driftsbiolog matfisk, Lerøy Hydrotech AS for biolog med bachelor eller master – 3 stillinger
31.03	Faculty position in BioGeology , Université Libre de Bruxelles, Belgium
31.03	2 post docs University of Washington
23.04	Professorship in plant physiology at the University of Innsbruck, Austria
?	Postdoc position on biogeochemical modelling, Brest, France
Spring 2010	10 post doctoral positions at The Alexander von Humboldt Foundation and the Cluster of Excellence „The Future Ocean” at the Christian-Albrechts University in Kiel, Germany

Forskning: utlysninger, nye satsinger og prosjekter

Eurofleets – tilgang til gratis toktid, Mulighet for forskningsrådsstøtte til Indiasamarbeid

Call for access on 18 European research vessels

EUROFLEETS is a European Union FP7 research infrastructure project to foster the cooperation within research fleets across Europe. This project aims at the shared use of European research vessels and associated equipment to enhance their efficiency and help reducing costs, also by providing scientists on land with real time data from cruises. The aim of the call is to provide ship-time for multi-national, collaborative research projects that will address important questions relating to all fields of basic marine research. A total of 66 fully funded days of ship-time on 5 Global/Ocean class research vessels and 110 days of ship-time on 13 Regional class ships is available, including the use of large equipment such as ROVs and submersibles, between 2011 and 2013. [Learn more.](#)



JOINTINDNOR og INDNOR

Research collaboration in India? Find calls that supports such activity here: [JOINTINDNOR](#) and [INDNOR](#)

Deadline: 21. April



Mer info om følgende utlysninger og mange flere (inkl. løpende, dvs. uten frister) finner du [her](#)

Husk å sende søknadsutkastet til post@bio.uib.no 1 uke i forveien (gjelder ikke mindre bevilgninger som legater og fonds)

15. mar	MESOAQUA : second call for participation in trans-national access at one of the network's mesocosms
17. mar	ERC Advanced Grants, Life sciences
17. mar	Research Training Courses (NordForsk)
22. mar	HFSP preregistration
25. mar	Marie Curie International Research Staff Exchange Scheme (IRSES)
25. mar	Researcher Networks 2010 (NordForsk)
26. mar	COST pre-proposal
31. mar	HFSP Submission deadline
01. apr	Nordic Marine Academy : siste organisering av forskerkurs og støtte til konferanser og workshops
21. apr	SFI Endelig søknad
21. apr	NATUROGNAERING (NFR)
21. apr	JOINTINDNOR (NFR)
30. apr	Daniel Jouvance International Prize for young researchers in Marine Biology
01. mai	Nordic Marine Academy : siste mobilitetstipend
31. mai	EUROFLEETS call for multidisciplinary practical ship-based training courses
02. juni	Aurora-programmet . Forskerutveksling mellom Norge og Frankrike (IS-AUR)

Forskerutdanning / PhD training

Dupont, Trösse

Nicolas Dupont: "Skiftende vannklarhet og effektene på marint zooplankton"

MSc Nicolas Dupont disputerer fredag 19. mars for ph.d.-graden med avhandlingen: "Water clarity as a forcing factor of marine ecosystems. Modelling and data analysis of zooplankton vertical distribution"

Veiledere: Dag L. Aksnes, Øyvind Fiksen

Bedømmelseskomite:

Professor, ph.d. John H. Costello, Providence College, U.S.A.

Forskningsleder, ph.d. Dag Slagstad, SINTEF, Trondheim

Professor, dr.scient. Jarl Giske (leder av komiteen), Institutt for biologi, Universitetet i Bergen

Leder av disputasen:

Professor Petter Larsson, Universitetet i Bergen

Tid: Fredag 19. mars 2010, kl. 10.15

Sted: Stort auditorium, Høyteknologisenteret, Thormøhlensgate 55

Alle interesserte er velkommen

http://www.uib.no/info/dr_grad/2010/Dupont_Nicolas.html

Disputas: Christiane Trösse

MSc Christiane Trösse disputerer fredag 19. mars for ph.d.-graden med avhandlingen: "Mechanisms of cataract development in adult Atlantic salmon growers relative to dietary histidine and plant feed ingredients"

Veiledere: Rune Waagbø, Pål A. Olsvik, Olav Breck

Bedømmelseskomite:

Professor, PhD Kiron Viswanath, Høyskolen i Bodø

Forskningsdirektør, PhD Stéphane Panzerat, National Institute of Agronomic Research, France

Seniorforsker, dr.scient. Lisbeth Dahl (leder av komiteen), NIFES, Bergen

Leder av disputasen: Professor Geir Kåre Totland, Universitetet i Bergen

Tid: Fredag 19. mars 2010, kl. 10.15

Sted: Sildetønnen, NIFES, Nordnesboder 4, 4.etg.

Alle interesserte er velkommen

Avsluttende mastergradseksamen

Kaasa, Kronstad

Kristin Kaasa: Migrasjon og habitattilknytning hos vannrikse *Rallus aquaticus*

Kristin Kaasa holder onsdag 17. mars avsluttende presentasjon av sin masteroppgave i Biologi, biodiversitet, evolusjon og økologi.

Tittel på oppgaven: Migrasjon og habitattilknytning hos vannrikse *Rallus aquaticus*

Veiledere: Torstein Solhøy, Terje Lislevand, Institutt for samfunnsmedisinske fag. Sensor: Odd W.

Jacobsen. Bisitter: Christoffer Schander, BIO

Tid og Sted: Onsdag 17. mars kl. 10:15, Seminarrom K1, 1 etasje, Biobyggene

Høyteknologisenteret.

Alle interesserte velkommen!

Therese Kronstad: The value of forest matrix habitats for conservation: Butterfly distribution on a land-use gradient from mature forest to small-scale agriculture in Mabira Forest Reserve, Uganda

Therese Kronstad holder onsdag 17. mars avsluttende presentasjon av sin masteroppgave i Biologi, biodiversitet, evolusjon og økologi.

BIO-info

Nyheter fra Institutt for biologi

Tittel på oppgaven: The value of forest matrix habitats for conservation: Butterfly distribution on a land-use gradient from mature forest to small-scale agriculture in Mabira Forest Reserve, Uganda

Veiledere: Richard Telford. Sensor: Ørjan Totland, IMB. Bisitter: Jarl Giske, BIO

Tid og Sted: Onsdag 17. mars kl. 13:15, Seminarrom K2, 1 etasje, Biobyggene Høyteknologisenteret.

Alle interesserte velkommen!

Katerina Maria Liakonis: Effects of chronic and periodic exposures to ammonia on growth and eye health in juvenile Atlantic halibut (*Hippoglossus hippoglossus*)

Katerina Maria Liakonis holder torsdag 18. mars avsluttende presentasjon av sin masteroppgave i Havbruksbiologi.

Tittel på oppgaven: Effects of chronic and periodic exposures to ammonia on growth and eye health in juvenile Atlantic halibut (*Hippoglossus hippoglossus*)

Veiledere: Albert Imsland, Rune Waagbø, Atle Foss. Sensor: Anders Mangor Jensen, HI. Bisitter: Ivar Hordvik

Tid og Sted: Torsdag 18. mars kl. 10:15, Stort auditorium, 2. etasje, HIB.

Alle interesserte velkommen!

Nye medarbeidere

Kamil

Stipendiat Atif Kamil.

After completion of the 4 years Bachelor degree in Biotechnology from the Institute of Biotechnology, University of Peshawar, Peshawar, Pakistan, Atif Kamil was appointed as a lecture for 2 years at Qurtuba University and college Hayyatabad, Peshawar, Pakistan. In spring 2007, Atif started his M.Phil degree in Biotechnology from the Quaid-e-Azam University Islamabad, Pakistan. However in autumn 2007 he won a national competition under the overseas scholarship scheme administered by the Higher Education Commission (HEC) Pakistan. Based on his meritorious performance in the said screening test, Atif got an award for Master's leading to PhD for Norway and was subsequently placed in institute of Molecular



Biology, University of Bergen in the session Autumn 2007-Autumn 2009. While at MBI, he worked on his master's dissertation and undertook a project on Pure Proteomics - Apoptosis Related Post-Translational Modification of ERP57- under the supervision of associate professor, **Kari Espolin Fladmark**. In the said research group, Atif won a national competition of a scholarship from the Norwegian Proteomic Association (NPA) for attending 3rd proteomic summer school in Italy in autumn 2008. After successful completion of his aforementioned Master's degree, he got admission for doctoral studies under the aforementioned scholarship scheme at the Department of Biology, University of Bergen from spring 2010. At the department of biology he is working under the supervision of Professor **Ivar Hordvik** in the Fish disease group. The title of his doctoral research project is "Characterization of Immunoglobulin isotypes and accessory molecules in Atlantic salmon (*Salmo salar*)". In this project Atif will work on the different isotypes of IgM and IgT and their accessory molecules in Atlantic salmon, Rainbow trout, char and brown trout.

Faglige møter

Cellebiologi (BBB Junior Mini-symposium), Microbial Communication, Museumskonferanse, Marin bioteknologi (ESF)

BBB Junior Mini-Symposium "Cell Biology"

All are invited, especially PhD-candidates, post-docs and Master students, to the 7th BBB Junior Mini-Symposium "Cell Biology" on Friday, March 19th 2010, in Auditorium 1 of BBB building, 13:00. [Read more.](#)

European Student Conference on Microbial Communication

The PhD students of the Jena School for Microbial Communication cordially invite you to attend the first European Student Conference on Microbial Communication on September 28 - October 1, 2010 in the top-class science city of Jena, Germany.

The conference is a meeting of PhD students and scientific experts from all over the world who will actively discuss and exchange ideas on the different aspects of microbial communication. The program consists of scientific talks, inspiring workshops in small groups ('Meet the Experts') given by leading scientists in the field of microbial communication as well as social and cultural events. [Learn more.](#)



FREMTIDENS MUSEUM

En av universitetsmuseenes hovedfunksjoner er å arbeide for å øke tilgjengeligheten til kultur- og naturarv blant annet ved å gjøre de kunnskapsmessige tersklene for å besøke museene så lave som mulig. Universitetsmuseene står foran nye krav og utfordringer med store planer både for museumsbyggene, infrastruktur og formidlingsinnhold, og dette gir spennende muligheter til nytenking omkring hvordan fremtidens formidling skal foregå. [Lær mer.](#) I universitetsmiljøene finnes det sterke fagmiljø og enkeltforskere som har arbeidet med forskningsformidling og det museale fagfeltet. Vi ønsker å diskutere formidling i bred forstand, og da spesielt samfunnets behov for og bruk av universitetsmuseene.



Spennende foredragsholdere fra ulike universitetsmiljø vil snakke om bl.a. gjenstandens makt - om media, publikum og forskerens rolle, møtet mellom forskning og formidling, museenes rolle som kunnskapsarena i historien og i samfunnet i dag, gjenstandens plass i forskningsformidling og hvordan formidle forskning til publikum. [Invitasjonen](#) til konferanse. [Program.](#)

High Level Research Conference on Marine Biotechnology (European Science Foundation)

For more information about the [conference](#) and preliminary [program](#)
For more information on how to [apply](#)

Summer school programmes

Date	Location	Course title	application deadline
May 24-29	Mammal Research Institute, Polish Academy of Sciences, Białowieża, Poland	Summer School in Ecology and Biodiversity: Understanding patterns and Processes	31 March
17 July - 1 August	Island of Madeira	3rd EDIT Summer School of Taxonomy	31 May
August 23-27	Brest, France	ClimECO2 Oceans, Marine Ecosystems, and Society facing Climate Change	15 April
Sept 5-14	Peyresq, France	Alter-Net Summer Schools: Biodiversity & Ecosystem Services	15 April

Nye artikler

Iberiasnegl og andre mollusker

Bjørn Arild Hatteland, Christian Mong & Torstein Solhøy: Predation by beetles on the Iberian slug

Hatteland, B. A., Grutle, K., Mong, C. E., Skartveit, J., Symondson, W. O. C. & T. Solhøy. 2010 [Predation by beetles \(*Carabidae*, *Staphylinidae*\) on eggs and juveniles of the Iberian slug *Arion lusitanicus* in the laboratory](#). - Bulletin of Entomological Research, doi:10.1017/S0007485309990629

Abstract: *Arion lusitanicus* has become a major pest species in western Norway in the last few years. This species originates from southern Europe but has been spread by humans over large parts of central and northern Europe during recent decades. Slugs have traditionally been controlled by the use of molluscicides; but, as these may have serious ecological side effects, biological control of slugs is highly desirable. Potential biological control agents include nematodes, gastropods and arthropods. In laboratory experiments, we tested whether five common predator beetles would feed on eggs and juveniles of *A. lusitanicus*. The species *Carabus nemoralis*, *Nebria brevicollis*, *Pterostichus melanarius* and *Pterostichus niger* (*Carabidae*) as well as *Staphylinus erythropterus* (*Staphylinidae*) were tested, of which only *P. melanarius* has been tested on *A. lusitanicus* previously. *Nebria brevicollis* did not feed on slug eggs or newly hatched slugs, but the remaining four species all killed and ate a large proportion of the eggs and hatchlings offered. Both *P. melanarius* and *P. niger* also destroyed *A. lusitanicus* eggs and hatchlings under conditions emulating those in the field. Prey size choice experiments were conducted by feeding *C. nemoralis*, *P. niger* and *S. erythropterus* on different sizes of *A. lusitanicus*. *Carabus nemoralis* was also given a choice between two slug species, *A. lusitanicus* and *Deroceras reticulatum*. A significant preference for slugs smaller than one gram was evident for *C. nemoralis*, while the other beetles struggled much more to overcome the mucus of juvenile slugs. No significant preference was found between *A. lusitanicus* and *D. reticulatum* as prey for *C. nemoralis*. We also discuss the feasibility of biological control of *A. lusitanicus* using beetle predators.

Christiane Todt: Development of the basal mollusk *Wirenia argentea* (Solenogastres) and its bearing on the evolution of trochozoan larval key features

Christiane Todt, Andreas Wanninger 2010. Of tests, trochs, shells, and spicules: Development of the basal mollusk *Wirenia argentea* (Solenogastres) and its bearing on the evolution of trochozoan larval key features *Frontiers in Zoology* 2010, 7:6

Abstract: Background: The phylogenetic status of the aplacophoran mollusk taxon Solenogastres (Neomeniomorpha) is controversially discussed. Some authors propose the clade to represent the most basal branch within Mollusca, while others claim aplacophoran mollusks (Solenogastres and Caudofoveata) to be derived. Larval characters are central in these discussions, specifically the larval test (calymma, apical cap), the ontogeny of the epidermal scleritome, and the proposed absence of larval protonephridia. To date, developmental data are available for five solenogaster species, but most reports are incomplete and need confirmation.

Results: *Wirenia argentea* deposit small batches of uncleaved embryos that are tightly enclosed by a smooth and transparent egg hull. Cleavage is spiral and unequal. The ciliated larvae hatch about 45 hours after deposition and swim actively in the water column. Within 48-60 hours after hatching they become mushroom-shaped with a pronounced apical cap partly enclosing a posterior trunk. The cells covering the apical cap are large and cleavage arrested. On the apical cap there is a prominent prototrochal band of compound cilia and an apical ciliary tuft and the trunk bears a terminal ciliary band (telotroch). Obscured by the apical cap, a ciliary band originates in the stomodaeal pore and surrounds the trunk. As development is proceeding, the trunk elongates and becomes covered by cuticle with the exception of a ventral ciliary band, the future foot. The larvae have a pair of protonephridia. At 5 days after hatching they begin to settle and within the following 7-9 days the apical cap is gradually reduced. Scattered epidermal sclerites form under the cuticle. *Wirenia argentea* lack iterated groups of sclerites at any developmental stage. At 40 days after hatching, the postlarvae have a fully developed foregut, but the midgut and hindgut are not yet interconnected.

Conclusions: Solenogastres develop via a trochophore-like lecitotrophic larva with a preoral apical cap that at least partly represents an enlarged prototrochal area. Homology of this larval type (pericalymma larva) to test cell larvae of other spiralian clades is doubtful. The ontogeny of *W. argentea* does not provide any evidence for a derived status of Solenogastres within Mollusca.