

Fra toppen!

Marinbiologisk stasjon

Siden Bergens Museums første biologiske stasjon ble etablert her på Marineholmen i 1892, via en periode på Herdla i 1922-1957, til dagens stasjon på Espevrend, har den marinbiologiske stasjonen vært et viktig grunnlag for å drive god marinbiologisk forskning i den internasjonale forskningsfronten. Den har samtidig vært hjertet i våre kurs og undervisning om livet i havet for generasjoner av marinbiologer.

I BIOs nye strategiplan er ett mål å opprettholde og videreutvikle «state-of-the-art» infrastruktur. Blant annet ved å etablere et «Espelandsprogram» for å videreutvikle den marinbiologiske stasjonen med mål om å beholde og styrke vår internasjonalt ledende posisjon i mesokosmebasert forskning.

Vi har nå oppnevnt en komité som under ledelse av Dag Aksnes skal utrede hvilke krav en moderne marinbiologisk stasjon bør oppfylle, og også vurdere om det finnes andre lokaliteter enn Espevrend som best kan imøtekomme slike krav. Vi må erkjenne at Espelands-området er under press fra både flyplassutbygging og evt. ny havn, og at utbyggingsmulighetene er minimale. En slik «mulighetsstudie» vil peke fremover mot neste kapittel i historien om marinbiologisk stasjon. Vi venter i spenning!

Hilsen Anders



Ukens bilde



Fuglefiskeri

Fotograf: Harald Kryvi

For tiden pågår et ganske aktivt fiskeri på Puddefjorden, rett utenfor våre lokaler. Det er mest ærfugl, men noen skarv og måser blander seg også inn. En rekke misunnelige kråker betrakter det hele fra kaikanten. Hva som fiskes, er ikke fastslått.

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 bio.info@bio.uib.no

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BIO-info

Nyheter fra Institutt for biologi

Faste lenker:

[BIO-info arkiv](#) [Sakslistor & referater](#) [BIOs interne websider](#) [BIO's eksterne websider](#)
[Facebook BIO](#) [Facebook STIM](#) [Facebook UiB](#)

VIKTIG INFORMASJON

Frist for å registrere i Cristin er 15 februar; Søknad om plass på forskningsinstallasjoner ved BIO og innenfor driftsavtalen UiB/ILAB; Bruk av personfaktura

Cristin Fristen for registrering er 15. februar, men det er en god idé å allerede nå begynne å legge inn fjordårets bragder i [Cristin](#) der man må [logge inn](#) som UiB-ansatt. I tillegg til vitenskapelige artikler gjelder dette også kronikker, debattinnlegg, formidling – også på radio og TV, og så vidare. En grei ordning er ellers at der hvor det er flere forfattere fra UiB, så har førsteforfatter ansvar for å legge inn data.

Søknad om plass på forskningsinstallasjoner ved BIO og innenfor driftsavtalen UiB/ILAB.

Vårsemesteret 2012: Søknadene må være de respektive ansvarlige i hende innen 24. januar. (Søknadsfrist høstsemesteret 20. august). Søknadskjema med instruksjer kan lastes ned [herfra](#).

Alle som arbeider med forsøksdyr skal ha godkjent kurs i forsøksdyrlære, dette gjelder også masterstudenter. Planlagte kurs for forskere, teknikere og masterstudenter finner du [her](#).

Søknader til forsøksdyrutvalget om tillatelse til å utføre forsøk med dyr, bør være innsendt senest 3 måneder før forsøkstart.

Frank Midtøy
Ansvarshavende for forsøk med dyr

Bruk av personfaktura

Viser til [vedlagte skriv](#) fra økonomiavdelingen sentralt. Der minner de oss på at bruk av rammeavtaler er obligatoriske, og at alle kjøp skal gjøres via UiB sitt elektroniske innkjøpssystem. Instituttledelsen ved BIO har sørget for at alle forskningsgruppene har en som kan foreta bestillinger for seg. Det vil selvfølgelig ikke være mulig å fjerne bruk av personfaktura fullstendig, men når det gjelder innkjøp som rekvisita, datautstyr og andre ting som UiB har avtaleleverandører på, så kan ytterste konsekvens være at økonomiavdelingen vil nekte å foreta utbetalinger på slike personfakturaer.

Med vennlig hilsen
Solfrid Sture
Økonomileder BIO

Studie

Nye masterstudenter, Prosjekt i biologi 10 sp

Nye masterstudenter til BIO

15 studenter starter sitt masterstudium ved BIO dette semesteret. Totalt var opptaket på 17 studenter, men noen har utsatt studiestarten til høsten. Vi ønsker de nye masterstudentene velkommen til BIO!

BIO-info

Nyheter fra Institutt for biologi

BIO299 Prosjekt i biologi

Vi har flere studenter som er interessert i å ta emnet BIO299 Research Project in Biology våren 2012. Prosjektet skal være på 10 studiepoeng.

Mål og innhold for emnet: [BIO299](#) provides advanced Bachelors students with the opportunity to participate in field investigations in collaboration with an experienced biologist. The student will receive a succinct summary of the advisor's research project, including the methods used and the reasoning behind the experimental design. The exact nature of the student's participation in the project will be defined by the supervisor. The extent of the course is defined by the credits awarded (10, which is 1/3 of a full-time workload), and should therefore be ca 200 hours of field/laboratory research, reading of assigned papers, and report writing. The timing of the course will vary depending on the schedules of the student and the supervisor.

Vi ber veiledere som ønsker å tilby et 10 studiepoengs prosjekt om å sende en kort prosjektbeskrivelse til studie@bio.uib.no. Studieseksjonen formidler kontakt med interesserte studenter.

Nyansatte

Oversikt over tilsetninger ved BIO siden oktober 2011

Vi har hatt gleden av å ønske følgende kolleger velkommen til BIO:

Navn/Stilling	Ansatt dato	Forskningsgruppe
Postdoc Sandra Schoettner	01.10.2011	Marin mikrobiologi
Postdoc Amy Eycott	17.10.2011	EECRG
Senioringeniør Elzbieta Anna Petelenz-Kurdziel	01.11.2011	Marin mikrobiologi
Postdoc Sandra Nogue-Bosch	01.12.2011	EECRG (VISTA)
Forsker Ingochouba Meetei Lukram	14.12.2011	Marin utviklingsbiologi
Postdoc Jon Anders Stavang	01.01.2012	Fiskesykdomsgruppen
Seniorkonsulent Ingunn Anita Wergeland	01.01.2012	Administrasjonen/koordinator SFI (Sea Lice Research Center)
Universitetstipendiat Keno Ferter	09.01.2012	Fiskeriøkologi og havbruk

HMS

Brannvernopplæring/Fire protection course

Alle ansatte ved UiB skal ha gjennomført brannvernopplæring, teori og praksis. Dette er lovfestet i brannloven og HMS-forskriften. Kurs går over 2 timer, 1 time teori og 1 time praktisk slukking. UiB har engasjert Teknisk industrivern AS til å gjennomføre dette. Kostnad pr. deltaker 250kr, som dekkes av instituttet. NB! Fakturering skjer pr. påmeldte, ikke fremmøtte. Hvis du er påmeldt men finner ut at du likevel ikke kan møte, er det viktig at du så raskt som mulig melder fra slik at BIO ikke "kaster penger ut vinduet".

Datoer: Torsdag 23. februar, torsdag 22 mars 2012, torsdag 19 april og torsdag 10. mai.

Sted og tid: Studentsenteret, Parkveien 1 seminarrom A, kl. 09.00-10.00-teori. Praksis fra kl.10.00 - 11.00. Praktisk slukking på plassen bak studentsenteret.

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Påmeldingen skjer samlet fra BIO. Påmelding sendes på mail til BIOs [ekspedisjon](#). De kan også formidle en eventuell avmelding.

Er det spørsmål om innholdet kan det rettes til Tore Reigstad - 55584947/91001919 - brann og sikkerhetsleder UiB.

Short version in English: All employees at UiB must have a fire protection course, theory and practicals. Duration: 2 hours. Courses this spring are held at the Student centre, Parkveien 1, seminar room A from 9:00-11:00. Dates: 23 February, 22 March, 19 April and 10 May. Courses are held in Norwegian but with a course handbook in English. Send your application by e-mail to BIO's [expedition](#). Please note that BIO is charged for each applicant, so please inform the expedition as soon as you can if you're not able to meet even though you signed up for the course so we don't have to pay for those not showing up!

ANDRE NYHETER

Mer til Russlands-forskning; Mattilsynet har vurdert risiko knyttet til resirkuleringsanlegg for settefisk av laks og regnbueørret; Nedetid på telefonen 18-19. januar

Større bredde i Russlands-forskningen



Utenriksdepartementet har, gjennom flere bevilgninger, styrket forskningsprogrammet Russland og internasjonale relasjoner i nordområdene (NORRUSS) med 105 mill. kroner for perioden 2012-16. Det tas sikte på utlysning med søknadsfrist i april.

[Les mer](#)

Risikovurdering knyttet til resirkuleringsanlegg for settefisk av laks og regnbueørret

Vitenskapskomiteen for mattrygghet (VKM) har, etter oppdrag fra Mattilsynet, foretatt en vurdering av risiko for helse og velferd til settefisk av laks og regnbueørret i resirkuleringsanlegg. En kort omtale av VKMs risikovurdering, selve risikovurderingen og oppdragsbrev fra Mattilsynet er å finne på www.vkm.no.

Nedetid på telefonlinjen 18/1-19/1 / Downtime on the telephone line 18/1-19/1

Vår telefonlinjeleverandør, TDC, informerer oss om at de vil drive vedlikeholdsarbeid på sine tjenester mellom 18/1 klokken 22:00 og 19/1 klokken 05:00. I denne perioden er det mulig at telefonsamtaler vil bli brutt uten varsel.

Our phone line supplier, TDC, have informed us that they'll be doing maintenance work on their services between 22:00 on 18/1 and 05:00 on 19/1. During this time phone conversations may be interrupted without warning.

Hilsen IT-avdelingen

Driftsmeldinger og annen informasjon fra IT-avdelingen publiseres på <http://it.uib.no>

NYE UTLYSNINGER

Mer info om utlysninger 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)

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Forskningsmidler gjennom VISTA; Funding through "Akademia"; BKK midler; NORGLOBAL; Grants for research on South Georgia; Student opportunities for microgravity experiments; Summer Course Marine Conservation;

Utlysning av forskningsmidler (Vista)

Det Norske Videnskaps-Akademi og Statoil samarbeider om grunnforskningsprogrammet VISTA. Til en hver tid støttes rundt 25 prosjekter innen områdene leting, økt oljeutvinning, olje- og gassprosessering, miljø og bioteknologi.

Aktuelle fagmiljøer ved norske universiteter inviteres til å søke om prosjektstøtte til dr. grads-studier eller post.doc-kandidater. Også enkeltforskere kan nå søke om prosjektstøtte gjennom VISTA-programmet.

Det vil bli fire årlige utlysninger. Den første søknadsfristen er 1. februar 2012.

[Mer informasjon og søknadsskjema](#)

Funding of activities related to petroleum research, through the "Akademia" agreement between UiB and Statoil.

YOU CAN APPLY FOR:

1) Travel to conferences etc. related to petroleum research for up to NOK 25 000 (Funds are not for educational purposes - participation with presentation will be given priority)

2) Visiting guest researchers (travel and stay)

Scientific staff and PhD Students can apply. The activity must take place in 2012. DEADLINE FOR APPLICATIONS : 26 January 2012. [More info](#)

Utlysning av midler til prosjekt fra samarbeidsavtalen med BKK.

Søknadene sendes til MN-fakultetet på epost: post@mnfa.uib.no med kopi til Kari Nordvik (Kari.Nordvik@mnfa.uib.no) innen **20. januar 2012**.

MN-fakultetet vil prioritere søknadene i Strategiutvalg for energiforskning (SEF) og oversende søknadene til Forskningsadministrativ avdeling. [Mer info](#)

Joint call for research on Population, (NORGLOBAL)

This is a call for pre-proposals. Like ECONPOP, PopDev aims to contribute to knowledge about the effects of population dynamics and reproductive health on different aspects of economic and social development.

Søknadsfrist: 15.03.2012 13:00 CET [Les mer](#)

New collaborators fund to develop scientific research on South Georgia, Falkland Islands

Two small grants (to a maximum of £25,000 each) are offered for the 2012/13 or 2013/14 seasons to enable researchers to undertake scientific work on South Georgia. Research projects will be based at KEP, but could undertake fieldwork on the Thatcher, Greene, Busen or Barff peninsulas. The fishery patrol vessel *Pharos SG* can also be used to support limited marine science in the waters around South Georgia.

Proposals must be submitted by **March 31st 2012** and must not exceed 4 pages of A4

Grants are available to all areas of science, including physical, biological and geological. [More info](#)

'Drop Your Thesis!'

The 'Drop Your Thesis!' programme gives university students the opportunity to perform their own scientific experiment in microgravity conditions, as part of their Masters thesis, PhD thesis or research programme, by participating in an ESA-sponsored campaign at the drop tower facility operated of the ZARM Centre of Applied Space Technology and Microgravity in Bremen, Germany. Application deadline: February 13 2012 [More info](#)

Global Fellowships in Marine Conservation (Summer Term II)

The Duke University Marine Laboratory is offering an unparalleled educational opportunity from July 9

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to August 10, 2012. Duke's Integrated Marine Conservation Program focuses on principles necessary for the conservation and preservation of coastal and ocean environments during an intensive 5-week summer session.

Global Fellowships in Marine Conservation will be awarded on a competitive basis. The Fellowship fully covers travel expenses, room and board, and tuition for both BIO 109/ENV 209 Conservation Biology and Policy plus one specialized elective course. Electives (subject to availability) include: Biology and Conservation of Sea Turtles, Marine Mammals, Marine Ecology and Marine Invertebrate Zoology. The Global Fellowship application deadline for summer, 2012, is February 15, 2012.

The Global Fellowships are available to any international applicant with a good working knowledge of English who has an interest in marine conservation biology and policy, ideally with the intent to apply this interest to the practice of coastal and marine conservation. The course does not have specific prerequisites, but Global Fellows have a BA or BS degree in hand, are enrolled in such programs, or have some professional experience. [More info](#)

KOMMENDE MØTER OG SEMINAR

Mer info om kurs, møter, seminar og arrangement etc finner du [her](#).

ForBIO meeting; 7th Norwegian Proteomics meeting;

Annual Meeting of the Research School for Biosystematics: Biogeography & Biodiversity.

This year's ForBio meeting will be held 8 and 9 March 2012. The event will take place in Trondheim, Norway.

Our meeting is meant to bring together scientist from a variety of backgrounds, all working with biosystematics. You will get the opportunity to listen to talks from the leaders in the field and discuss your own research at the many opportunities for social interactions during the meeting. The ForBio meeting is free to anyone interested in biosystematics, but please register your attendance before the 1st of February. [More info](#)

7th Norwegian Proteomics meeting

The registration for the 7th Norwegian Proteomics meeting in Tromsø March 19-20 have opened. You will find details for registration and abstract submission [here](#)
Registration of will be closed February 17th.

LEDIGE STILLINGER

Mer info finner du [her](#). Stillinger utlyst på BIO finner du nederst til høyre på instituttets [nettside](#) .

NYE ARTIKLER

***A full listing of BIO's ISI publications can be found on BIO's internal web pages. [Click here](#)

Hoffmann; Rapp; Leininger; Schleper; Heino; Nilsen; Rønnestad; Stefansson; Lygre; Schander; Høgstedt; Langård; Johannessen; Fernö

Radax R, **Hoffmann F, Rapp HT, Leininger S, Schleper C**. Ammonia-oxidizing archaea as main drivers of nitrification in cold-water sponges. Environmental Microbiology. doi:10.1111/j.1462-2920.2011.02661.x

Summary: The association of archaea with marine sponges was first described 15 years ago and their role in the nitrification process in Mediterranean and tropical sponges has been suggested. Here we explore the occurrence and abundance of potential ammonia-oxidizing archaea (AOA) in four morphologically different cold-water sponges (Phakellia ventilabrum, Geodia barretti, Antho dichotoma

and *Tentorium semisuberites*) from the sublittoral and upper bathyal zone [Correction added on 30 December 2011, after first online publication on 19 December 2011: The term 'mesopelagic zone' has been replaced.] of the Norwegian coast, and relate them to nitrification rates determined in laboratory incubations. Net nitrification rates, calculated from the sum of nitrite and nitrate release during 24 h, were up to 1880 nmol N cm⁻³ day⁻¹; i.e. comparable with those measured in Mediterranean sponges. Furthermore, a high abundance of archaeal cells was determined by fluorescence in situ hybridizations (CARD-FISH) and quantitative PCR, targeting archaeal *amoA* genes (encoding the alpha subunit of ammonia monooxygenase). *AmoA* genes as well as *amoA* transcripts were either exclusively detectable from archaea or were orders of magnitudes higher in abundance than their bacterial counterparts. Phylogenetic analyses of AOA and bacterial nitrite oxidizers (genus *Nitrospira*) confirmed the presence of specific populations of nitrifying microorganisms in the sponge mesohyl, which either were affiliated with groups detected earlier in marine sponges or were typical inhabitants of cold- and deep-water environments. Estimated cell-specific nitrification rates for *P. ventilabrum* were 0.6 to 6 fmol N archaeal cell⁻¹ day⁻¹, thus comparable with planktonic organisms. Our results identify AOA as the major drivers of nitrification in four cold-water sponges, and indicate that these archaea may be considered as a relevant factor in nitrogen cycling in ocean regions with high sponge biomass.

Boukal, D. S., Jankovský, M., Kubečka, J., and **Heino, M.** 2012. Stock-catch analysis of carp recreational fisheries in Czech reservoirs: insights into fish survival, water body productivity and impact of extreme events. *Fisheries Research*, 119-120: 23-32.

Abstract: In culture-based fisheries, managers strive for high stocking efficiency, the ratio between the total weight of caught and stocked fish. Here we present a new time series approach to examine the dependence of reported anglers' catches on stocking and external events, using data on carp (*Cyprinus carpio* L.) from 14 reservoirs in the Czech Republic. Average stocking efficiency varied between 0.25 and 2.2, with values close to unity in most reservoirs. The lowest efficiencies occurred in three reservoirs receiving cold hypoxic water from a large upstream reservoir, while the highest efficiencies were found in two shallow, highly productive reservoirs. Analyses further indicate that stocked carp are typically caught during the year of release or the year after; but also that the mean time lag between stocking and capture increases with reservoir area. External events can be important: major floods in the years 2002 and 2006 were in many cases followed by large, up to 10-fold, increases in catches in subsequent years; we attribute the surplus catch to carp washed down from upstream aquaculture and river stretches. In contrast, the "Velvet Revolution" (demise of the communist regime in 1989) had no discernible effect on catches in subsequent years. In conclusion, the proposed method can simultaneously estimate the likely mean survival time of stocked carp and identify the impact of major environmental and societal events on recreational fisheries. The approach thus sheds light on the performance of current stocking practices at individual reservoirs, and could be used to monitor and improve stocking strategies and management of culture-based recreational fisheries.

Peter Kling, Elisabeth Jönsson, **Tom Ole Nilsen**, Ingibjörg Eir Einarsdóttir, **Ivar Rønnestad**, **Sigurd O. Stefansson**, Björn Thrandur Björnsson. The role of growth hormone in growth, lipid homeostasis, energy utilization and partitioning in rainbow trout: Interactions with leptin, ghrelin and insulin-like growth factor I. *General and Comparative Endocrinology* 175 (2012) 153–162

Abstract: The growth-promoting effects of *in vivo* growth hormone (GH) treatment were studied in relation to size and lipid content of energy stores including liver, mesentery, white muscle and belly flap in rainbow trout. In order to elucidate endocrine interactions and links to regulation of growth, adiposity and energy metabolism, plasma levels of GH, insulin-like growth factor I (IGF-I), leptin (Lep) and ghrelin, were assessed and correlated to growth and energy status. In addition tissue-specific expression of *lepa1* mRNA was examined. Juvenile rainbow trout were implanted with sustained-release bovine GH implants and terminally sub-sampled at 1, 3 and 6 weeks. GH increased specific growth rate, reduced condition factor (CF) and increased feed conversion efficiency resulting in a redistribution of energy stores. Thus, GH decreased mesenteric (MSI) and liver somatic index (LSI). Lipid content of the belly flap increased following GH-treatment while liver and muscle lipid content decreased. Independent of GH substantial growth was accompanied by an increase in muscle lipids and a decrease in belly flap lipids. The data suggest that the belly flap may function as an energy

buffering tissue during episodes of feeding and lean growth. Liver and muscle lipids were positively correlated to body weight, indicating a size-dependent change in adiposity. Hepatic *lepa1* mRNA positively correlated to MSI and CF and its expression decreased following GH treatment, coinciding with decreased hepatic lipid content. Plasma Lep was positively correlated to MSI and belly flap lipid content, suggesting that Lep may communicate energy status. In summary, the observed GH tissue-specific effects on lipid metabolism in rainbow trout highlight the complex physiology of the energy reserves and their endocrine control.

Lygre F, Kongsrud JA, Schander C (2011) Four new species of Turbonilla (Gastropoda, Pyramidellomorpha, Turbonillidae) from the Gulf of Guinea, West Africa. *African Invertebrates* 52:243-254

Abstract: Four new species of Pyramidellid gastropods, *Turbonilla nanseni*, *T. willasseni*, *T. halanychi* and *T. hoesaeteri* are described from the Gulf of Guinea, West Africa, based on shell morphology. The descriptions are a part of an ongoing project describing the pyramidellid fauna of the area, and it is clear that the region hosts a large pyramidellid diversity and additional species of pyramidellids are to be expected. The recent usage of the genus *Turbonilla* is discussed.

Erlinge S, Hasselquist D, **Hogstedt G**, Seldal T, Frodin P, Svensson M (2011) Lemming-Food Plant Interactions, Density Effects, and Cyclic Dynamics on the Siberian Tundra. *Arctic* 64:421-428

Abstract: Theory predicts that trophic interactions can produce cyclic dynamics of microtine rodents, but that in addition, social interactions are necessary to create the cyclicity. We tested the induced defence hypothesis as a component driving multiannual cycles by analyzing data on Siberian lemming (*Lemmus sibiricus* Kerr) populations and the levels of trypsin inhibitors (TI) and free proteins (SPP) in their food plants. We collected data at 12 sites along the Palaeartic tundra coast in 1994 and correlated these measures with lemming density and cycle phase. A negative correlation between lemming density and TI/SPP in *Carex* was found at the 12 sites. Cycle phase tended to correlate significantly with TI/SPP, and plants being grazed by lemmings respond with some delay. Mass of pancreas, the organ producing proteolytic enzymes, co-varied negatively with TI/SPP. These findings are in accord with predictions from the induced defence hypothesis. In contrast, reproductive effort did not conform to the predictions but co-varied strongly with density. Data are in accord with theory predicting that, in addition to trophic interactions, some self-regulation is necessary to create cyclic dynamics. Our data show that the plant defence hypothesis alone is not a sufficient explanation for the cyclicity. Several factors interact, including predation, food quality (including induced defence chemicals), and intra-specific competition.

Nytt bokkapittel:

Lise Langård, Arne Johannessen, Anders Fernö, Leif Nøttestad, Georg Skaret, Aril Slotte, Jostein Røttingen, and Jan T. Øvredal 2012. Acoustic Tagging: A Suitable Method for the Study of Natural Herring Behavior Around Spawning? In: A.N. Popper and A. Hawkins (eds.), *The Effects of Noise on Aquatic Life*, 383 *Advances in Experimental Medicine and Biology* 730, DOI 10.1007/978-1-4419-7311-5_87, © Springer Science+Business Media, LLC 2012