Pike (Esox lucius L.) on the edge: consistent individual movement patterns in transitional waters of the western Baltic

Pike in the western Baltic Sea live on the edge of their salinity tolerance. Under physiologically challenging conditions, organism may respond by moving to environmentally more benign areas during critical periods, such as during spawning. We hypothesised that pike in a brackish lagoon (8–10 ppt salinity) would perform spawning- and feeding-related movements between areas with different salinity regimes. Twenty-two pike were caught prior to spawning, tagged with acoustic transmitters, and their movements were tracked for 18 months. Pike showed two main patterns of movements that were consistent within individuals across two years. Whereas some individuals stayed in the lagoon year-round, most pike left the lagoon for longer periods after spawning and returned to the lagoon prior to following year’s spawning season. We found no evidence that probability of moving out of the lagoon co-varied with either length or condition factor. Despite the fact that the lagoon’s salinity is close to the reported upper limit for pike egg development, results indicated that all pike spawned in the lagoon. Correspondingly, genetic data showed that all fish belonged to the same reproductive population unit. Movement patterns thus appear to reflect individual variation in home-range and/or resource optimisation following ideal free principles.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology, Section for Marine Living Resources, Institute Management
Authors: Jacobsen, L. (Intern), Bekkevold, D. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Koed, A. (Intern), Aarestrup, K. (Intern), Baktoft, H. (Intern), Skov, C. (Intern)
Pages: 143–154
Publication date: 2017
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 784
Issue number: 1
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Udsætning af signalkrebs i naturen kan medføre alvorlig straf

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Sivebæk, F. (Intern), Berg, S. (Intern)
Publication date: 2017

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/nyheder/2017/09/signalkrebs-udsætning-strafbart?id=8a0a521a-f2de-44d1-a8a7-d8013296790b&utm_source=newsletter&utm_media=email&utm_campaign=2017_09_12_Nyhedsbrev
Aborrer og gedder i brakvand - betydningen af ferskvandsområder for gydning

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology, Section for Marine Ecology and Oceanography, University of Copenhagen
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern), Nielsen, J. (Intern), Aarestrup, K. (Intern), Jepsen, N. (Intern), Christensen, E. A. F. (Intern), Skovrind, M. (Ekstern), Højrup, L. B. (Ekstern)
Publication date: 2016
Event: Poster session presented at Dansk Ferskvandssymposium 2016, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Publication: Research › Poster – Annual report year: 2016

Erfurvsmæssig fangst af ferskvandsfisk i Danmark

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2016

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2016/06/Erhvervsfiskeri-efter-ferskvandsfisk?id=7c020472-0477-41d0-9791-9cc16f6ec8c00&utm_source=newsletter&utm_media=mail&utm_campaign=2016_06_15_Nyhedsbrev
Publication: Communication › Internet publication – Annual report year: 2016

EU’s dødsliste over invasive arter er nu trådt i kraft

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2016

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2016/08/Signalkrebs-og-baandgrundling?id=cafa5491-9913-4bbd-a8b4-2dc6a4dca4&utm_source=newsletter&utm_media=mail&utm_campaign=2016_08_02_Nyhedsbrev
Publication: Communication › Internet publication – Annual report year: 2016

Feeding ecology

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Dörner, H. (Ekstern), Berg, S. (Intern)
Pages: 171-191
Publication date: 2016

Host publication information
Title of host publication: Biology and Ecology of Anguillid Eels
Publisher: C R C Press LLC
Editor: Arai, T.
ISBN (Print): 978-1-48-225515-7
Main Research Area: Technical/natural sciences
Phenotypic variation in metabolism and morphology correlating with animal swimming activity in the wild: relevance for the OCLTT (oxygen- and capacity-limitation of thermal tolerance), allocation and performance models

Ongoing climate change is affecting animal physiology in many parts of the world. Using metabolism, the oxygen- and capacity-limitation of thermal tolerance (OCLTT) hypothesis provides a tool to predict the responses of ectothermic animals to variation in temperature, oxygen availability and pH in the aquatic environment. The hypothesis remains controversial, however, and has been questioned in several studies. A positive relationship between aerobic metabolic scope and animal activity would be consistent with the OCLTT but has rarely been tested. Moreover, the performance model and the allocation model predict positive and negative relationships, respectively, between standard metabolic rate and activity. Finally, animal activity could be affected by individual morphology because of covariation with cost of transport. Therefore, we hypothesized that individual variation in activity is correlated with variation in metabolism and morphology. To test this prediction, we captured 23 wild European perch (Perca fluviatilis) in a lake, tagged them with telemetry transmitters, measured standard and maximal metabolic rates, aerobic metabolic scope and fineness ratio and returned the fish to the lake to quantify individual in situ activity levels. Metabolic rates were measured using intermittent flow respirometry, whereas the activity assay involved high-resolution telemetry providing positions every 30 s over 12 days. We found no correlation between individual metabolic traits and activity, whereas individual fineness ratio correlated with activity. Independent of body length, and consistent with physics theory, slender fish maintained faster mean and maximal swimming speeds, but this variation did not result in a larger area (in square metres) explored per 24 h. Testing assumptions and predictions of recent conceptual models, our study indicates that individual metabolism is not a strong determinant of animal activity, in contrast to individual morphology, which is correlated with in situ activity patterns.
Behavioural strategy of large perch *Perca fluviatilis* varies between a mesotrophic and a hypereutrophic lake

Behaviour of large perch *Perca fluviatilis* was studied in two lakes differing in environmental state i.e. mesotrophic v. hypereutrophic. A total of 20 adult perch *P. fluviatilis* (29–42 cm total length) in each lake were tagged with radio-transmitters, tracked and located eight times a day during six 24 h tracking periods over a year, enabling detection of differences in diel activity patterns and habitat use during summer and winter under two different environmental regimes. During summer, *P. fluviatilis* in the mesotrophic lake showed a distinct crepuscular activity pattern and a change from pelagic residency during daytime towards the littoral zone at night. In contrast, *P. fluviatilis* in the hypereutrophic lake were active during the entire diel cycle and were spread throughout the lake also during dark. During winter, crepuscular patterns of activity were seen in both lakes. Condition factor of large *P. fluviatilis* did not differ between the two lakes. Thus, it is suggested that *P. fluviatilis* in the hypereutrophic turbid lake adopted an alternative behaviour for successful foraging, being uniformly active throughout the diel cycle.
From regionally predictable to locally complex population structure in a freshwater top predator: River systems are not always the unit of connectivity in Northern Pike Esox lucius

Contemporary genetic diversity is the product of both historical and contemporary forces, such as climatic and geological processes affecting range distribution and continuously moulded by evolutionary forces selection, gene flow and genetic drift. Predatory freshwater fishes, such as Northern Pike Esox lucius, commonly exhibit small population sizes, and several local populations are considered endangered. Pike inhabit diverse habitat types, including lakes, rivers and brackish marine waters, thus spanning from small isolated patches to large open marine systems. However, pike population structure from local to regional scales is relatively poorly described, in spite of its significance to developing conservation measures. We analysed microsatellite variation in a total of 1185 North European pike from 46 samples collected across both local and regional scales, as well as over time, to address two overarching questions: Is pike
population structure associated with local and/or regional connectivity patterns, and which factors likely have the main influence on the contemporary distribution of genetic diversity? To answer this, we combined estimators of population diversity and structure to assess evidence of whether populations within (i) habitats, (ii) drainage systems and (iii) geographical regions are closer related than among these ranges, and whether patterns are temporally stable. Contrasting previous predictions that genetic drift obscures signals of postglacial colonisation history, we identified clear regional differences in population genetic signatures, suggesting a major effect of drainage divides on colonisation history and connectivity. However, several populations deviated from the general pattern, showing that local processes may be complex and need to be examined case-by-case.
Fuglsang Sø – en perle i Herning med en imponerende fiskebestand

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology, Herning Kommune
Authors: Berg, S. (Intern), Lindvig, D. (Intern)
Publication date: 2015

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2015/03/Fuglsang-soe-ved-herning-fiskebestand
Publication: Communication › Internet publication – Annual report year: 2015

Lystfiskeri i Københavns Havn – mange nye muligheder

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2015

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2015/09/Fiskeri-koebenhavn?id=aa11ad83-d7ca-4dc7-b5db-d9c911bed118&utm_source=newsletter&utm_media=mail&utm_campaign=
Publication: Communication › Internet publication – Annual report year: 2015

Nye moser til brakvandsaborrer i Sydsjælland

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern), Nielsen, J. (Intern)
Publication date: 2015

Publication information
The effects of disturbances from recreational activities on the swimming speed and habitat use of roach Rutilus rutilus, perch Perca fluviatilis and pike Esox lucius were explored. Disturbances were applied for 4h as (1) boating in short intervals with a small outboard internal combustion engine or (2) boating in short intervals combined with angling with artificial lures between engine runs. The response of the fish species was evaluated by high-resolution tracking using an automatic acoustic telemetry system and transmitters with sub-minute burst rates. Rutilus rutilus swimming speed was significantly higher during disturbances [both (1) and (2)] with an immediate reaction shortly after the engine started. Perca fluviatilis displayed increased swimming activity during the first hour of disturbance but not during the following hours. Swimming activity of E. lucius was not significantly different between disturbance periods and the same periods on days without disturbance (control). Rutilus rutilus increased their use of the central part of the lake during disturbances, whereas no habitat change was observed in P. fluviatilis and E. lucius. No difference in fish response was detected between the two types of disturbances (boating with and without angling), indicating that boating was the primary source of disturbance. This study highlights species-specific responses to recreational boating and may have implications for management of human recreational activities in lakes.
|--------|------------|------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|------------|--------------|------------------|
Fiskebestanden i Fuglsang Sø – undersøgt september 2014

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Lindvig, D. (Ekstern), Berg, S. (Intern)
Number of pages: 17
Publication date: 2014

Publication information
Publisher: Herning Kommune
Original language: Danish
Main Research Area: Technical/natural sciences
Publication: Commissioned › Report – Annual report year: 2014

Fiskeri i sær - info om fiskearter

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2014

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2014/02/2014_02_18_Fiskefangster_i_soer
Publication: Communication › Internet publication – Annual report year: 2014

Fremmede fisk i danske sær

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 24-31
Publication date: 2014
Main Research Area: Technical/natural sciences

Publication information
Journal: Miljø- & vandpleje
Issue number: 39
ISSN (Print): 1904-0385
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Publication: Communication › Journal article – Annual report year: 2014
Frivillig regulering af fiskeriet kan forbedre fiskebestanden i din sø

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2014

Publication information
Source/Publisher: www.Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2014/01/2014_01_14_Bedre-fiskeri-i-soeer
Publication: Communication › Internet publication – Annual report year: 2014

Gensyn med to mærkede gedder

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2014

Publication information
Source/Publisher: fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Nyheder/2014/05/Gedder_vokser_godt
Publication: Communication › Internet publication – Annual report year: 2014

The effect of turbidity and prey fish density on consumption rates of piscivorous Eurasian perch Perca fluviatilis
Predator-prey interaction strengths in variable environments constitute a fundamental link to the understanding of aquatic ecosystem responses to environmental change. The present study investigates the effects of visibility conditions and prey fish density on predation rates of visually oriented piscivorous Eurasian perch Perca fluviatilis L. This was done in outdoor mesocosm (16 m²) experiments with clear water and two levels of turbidity (25 and 105 NTU) and two prey fish densities [3.1 and 12.5 roach Rutilus rutilus (L.) individuals m⁻²]. Perch consumption rates were affected by visibility less than expected, while they were highly affected by increased prey fish density. Perch responded to high prey density in all visibility conditions, indicating that prey density is more crucial for consumption than visibility in turbid lakes

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Baktoft, H. (Intern), Nilsson, P. (Ekstern), Skov, C. (Intern)
Pages: 187-190
Publication date: 2014
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Limnology
Volume: 73
Issue number: 1
ISSN (Print): 1129-5767
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.574 SNIP 0.861 CiteScore 1.66
BFI (2015): BFI-level 1
Winter activity of roach and perch in a temperate lake by high resolution positioning telemetry

**General information**

State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology, Institute Management
Authors: Jacobsen, L. (Intern), Baktoft, H. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Koed, A. (Intern), Aarestrup, K. (Intern), Skov, C. (Intern)
Publication date: 2014
Event: Abstract from EcoFiL, Ceske Budejovice, Czech Republic.
Main Research Area: Technical/natural sciences
Publication: Research › Conference abstract for conference – Annual report year: 2014

Bæklampret – en ganske særlig og sjældent set skabning på Bornholm

**General information**

State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 36-39
Effects of angling and manual handling on pike behaviour investigated by high-resolution positional telemetry

Human disturbances such as angling and manual handling may have long-term effects on the behaviour of pike, Esox lucius L., an ecologically important species. Using continuous high-resolution positional telemetry, this study compared the swimming activity of handled and unhandled pike in a small lake. Pike pre-equipped with acoustic transmitters were angled and exposed to a handling protocol including measurements of length and mass. Pike not recaptured constituted an unhandled control group. Results demonstrated that the handling protocol caused temperature-dependent changes in pike activity, with higher temperatures leading to lower activity of the recaptured pike. The effects, however, were transitory and not detectable after 48-h post-release. These findings indicate that pike are relatively resilient to handling and quickly resume pre-handling activity.
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.796 SNIP 0.936
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 0.823 SNIP 0.87
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 0.813 SNIP 1.255
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 0.863 SNIP 1.05
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.76 SNIP 0.939
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.418 SNIP 0.674
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 0.405 SNIP 0.593
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 0.478 SNIP 0.662
Scopus rating (2001): SJR 0.482 SNIP 0.647
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 0.414 SNIP 0.68
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 0.514 SNIP 0.574
Original language: English
DOIs: 10.1111/fme.12040
Publication: Research - peer-review › Journal article – Annual report year: 2013

Hvornår er sørestaurering en god idé?

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Skov, C. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/Soeer/vandmiljoe-i-soer-(generelt)/soerestaeruering/hvonnaar-soerestaeruering
Publication: Communication › Internet publication – Annual report year: 2013

Karpen – klog fisk med god lugtesans

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Skov, C. (Intern), Berg, S. (Intern)
Pages: 14-15
Publication date: 2013
Main Research Area: Technical/natural sciences

Publication information
Journal: Sportsfiskeren
Issue number: 4. maj
ISSN (Print): 0038-8211
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
Lovbestemte fiskerireguleringer

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
Publication: Communication › Internet publication – Annual report year: 2013

NOBANIS – Invasive Alien Species Fact Sheet Stizostedion lucioperca (2nd ed.)

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Larsen, L. K. (Ekstern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Online Database of the North European and Baltic Network on Invasive Alien Species – NOBANIS
Main Research Area: Technical/natural sciences
Links:
http://www.nobanis.org
Publication: Research - peer-review › Internet publication – Annual report year: 2013

Råd og vejledning for udsætning af fisk og krebs

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
Publication: Communication › Internet publication – Annual report year: 2013

Regler for frivillig regulering

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2013

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Main Research Area: Technical/natural sciences
Links:
Regler for udsætning

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/soeer/fiskepleje-i-din-soe/udsaetning/regler

Regulere fiskeriet

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:

Signalkrebs – en ny og uvelkommen art på Bornholm

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 7-13
Publication date: 2013

Publication information
Journal: Natur på Bornholm
Issue number: 11
Original language: Danish
Publication: Communication › Journal article – Annual report year: 2013

Søernes fisk

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern), Skov, C. (Intern)
Pages: 339-365
Publication date: 2013

Host publication information
Title of host publication: Naturen i Danmark. De ferske vande
Place of publication: København
Publisher: Gyldendal
Editor: Jensen, K. S.
ISBN (Print): 978-87-02-030297
Tilladelse til udsættning af fisk i søer

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
Publication: Communication › Internet publication – Annual report year: 2013

Tilskud til udsættning af fisk og krebs i søer

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2013

Publication information
Source/Publisher: Fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
Publication: Communication › Internet publication – Annual report year: 2013

Udsætning af krebs – hvad siger loven?

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 8-10
Publication date: 2013
Main Research Area: Technical/natural sciences

Publication information
Journal: Flodkrebsen
Issue number: 3
Original language: Danish
Publication: Communication › Journal article – Annual report year: 2013

Aborre: Perca fluviatis Linnaeus, 1758

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 569-585
Publication date: 2012

Host publication information
Title of host publication: Atlas over danske ferskvandsfisk
Place of publication: København
Publisher: Statens Naturhistoriske Museum
Aspects of lentic fish behaviour studied with high resolution positional telemetry

General information
State: Published
Organisations: National Institute of Aquatic Resources
Authors: Baktoft, H. (Intern), Skov, C. (Intern), Svendsen, J. C. (Intern), Berg, S. (Intern), Aarestrup, K. (Intern), Koed, A. (Intern), Jacobsen, L. (Intern)
Number of pages: 118
Publication date: 2012

Publication information
Place of publication: Kgs. Lyngby
Publisher: Technical University of Denmark (DTU)
Original language: English
Main Research Area: Technical/natural sciences
Electronic versions:
120529_PhD_dissertation_Baktoft..PDF
Publication: Research › Ph.D. thesis – Annual report year: 2012

Atlas over danske ferskvandsfisk

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology, Natural History Museum of Denmark
Authors: Carl, H. (ed.) (Ekstern), Rask Møller, P. (ed.) (Ekstern), Rasmussen, G. (Intern), Berg, S. (Intern), Nielsen, J. G. (Ekstern)
Number of pages: 700
Publication date: 2012

Publication information
Place of publication: København
Publisher: Statens Naturhistoriske Museum
ISBN (Print): 978-87-87519-74-8
Original language: Danish
Main Research Area: Technical/natural sciences
Publication: Research › Book – Annual report year: 2012

De ferske vande i Danmark

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern), Rasmussen, G. (Intern)
Pages: 37-49
Publication date: 2012

Host publication information
Title of host publication: Atlas over danske ferskvandsfisk
Place of publication: København
Publisher: Statens Naturhistoriske Museum
Editors: Carl, H., Møller, P. R.
ISBN (Print): 978-87-87519-74-8
Main Research Area: Technical/natural sciences
Publication: Research › Book chapter – Annual report year: 2012

Der er en grund til at signalkrebsen er forbudt i Danmark
**General information**
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 19-21
Publication date: 2012
Main Research Area: Technical/natural sciences

**Publication information**
Journal: FerskvandsfiskeriBladet
Volume: 110
Issue number: 5
Ratings:
- ISI indexed (2013): ISI indexed no
- ISI indexed (2012): ISI indexed no
- ISI indexed (2011): ISI indexed no
Original language: Danish
Links:
http://www.fer skvandsfiskeri foreningen.dk/pdf/Blad_nr_5_2012.pdf
Publication: Communication › Journal article – Annual report year: 2012

**Effect of anthropogenic disturbances on lake fish individual behaviour**

**General information**
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Baktoft, H. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Skov, C. (Intern), Aarestrup, K. (Intern)
Publication date: 2012
Main Research Area: Technical/natural sciences
Publication: Research › Poster – Annual report year: 2012

**Effekten af rekreative aktiviteter på fiskenes adfærd i en lille sø**

**General information**
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Baktoft, H. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Skov, C. (Intern), Aarestrup, K. (Intern)
Publication date: 2012
Event: Abstract from Ferskvandssymposium på Syddansk Universitet, Odense, Denmark.
Main Research Area: Technical/natural sciences
Publication: Research › Conference abstract for conference – Annual report year: 2012

**Gedde: Esox lucius Linnaeus, 1758**

**General information**
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern)
Pages: 351-375
Publication date: 2012

**Host publication information**
Title of host publication: Atlas over danske ferskvandsfisk
Place of publication: København
Publisher: Statens Naturhistoriske Museum
Editors: Carl, H., Møller, P. R.
ISBN (Print): 978-87-87519-74-8
Main Research Area: Technical/natural sciences
Publication: Research › Book chapter – Annual report year: 2012
Seasonal and diel effects on the activity of northern pike studied by high-resolution positional telemetry

Temperate lakes can be ice covered for several months each year, yet little is known about the behaviour and activity of the fish during the cold season. As northern pike represents the top of the food web in many northern temperate lakes and may structure the ecosystem both directly and indirectly, a detailed understanding of the behaviour of this species during winter is important. We continuously monitored the activity of adult northern pike (Esox lucius) in a small temperate lake from late summer to winter for two consecutive years using an automatic acoustic positional telemetry system. Four subsample periods representing different temperature regimes from each year were chosen for further investigation. The results revealed that pike activity was similar between seasons. In all periods, a distinct diel pattern, showing increased activity during day as compared to night, was evident. Our findings indicate that the fish component of temperate lentic...
ecosystems can be more active during the cold season than previously assumed. This may have implications for the structuring effect of pike on the lower trophic levels

**General information**

State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Fisheries and Oceans Canada
Pages: 386-394
Publication date: 2012
Main Research Area: Technical/natural sciences

**Publication information**

Journal: Ecology of Freshwater Fish
Volume: 21
Issue number: 3
ISSN (Print): 0906-6691
Ratings:
- BFI (2018): BFI-level 1
- Web of Science (2018): Indexed yes
- BFI (2017): BFI-level 1
- Web of Science (2017): Indexed yes
- BFI (2016): BFI-level 1
- Scopus rating (2016): CiteScore 1.66 SJR 0.804 SNIP 0.885
- BFI (2015): BFI-level 1
- Scopus rating (2015): SJR 1.022 SNIP 1.192 CiteScore 1.92
- Web of Science (2015): Indexed yes
- BFI (2014): BFI-level 1
- Scopus rating (2014): SJR 0.866 SNIP 0.994 CiteScore 1.58
- Web of Science (2014): Indexed yes
- BFI (2013): BFI-level 1
- Scopus rating (2013): SJR 0.971 SNIP 1.072 CiteScore 1.77
- ISI indexed (2013): ISI indexed yes
- Web of Science (2013): Indexed yes
- BFI (2012): BFI-level 1
- Scopus rating (2012): SJR 1.061 SNIP 1.247 CiteScore 2.05
- ISI indexed (2012): ISI indexed yes
- Web of Science (2012): Indexed yes
- BFI (2011): BFI-level 1
- Scopus rating (2011): SJR 0.979 SNIP 0.887 CiteScore 1.65
- ISI indexed (2011): ISI indexed yes
- BFI (2010): BFI-level 1
- Scopus rating (2010): SJR 0.812 SNIP 0.968
- Web of Science (2010): Indexed yes
- BFI (2009): BFI-level 1
- Scopus rating (2009): SJR 0.817 SNIP 1.006
- BFI (2008): BFI-level 2
- Scopus rating (2008): SJR 0.932 SNIP 0.985
- Web of Science (2008): Indexed yes
- Scopus rating (2007): SJR 0.791 SNIP 0.883
- Web of Science (2007): Indexed yes
- Scopus rating (2006): SJR 0.875 SNIP 1.183
- Web of Science (2006): Indexed yes
- Scopus rating (2005): SJR 0.659 SNIP 0.92
- Web of Science (2005): Indexed yes
- Scopus rating (2004): SJR 0.907 SNIP 1.191
Signalkrebsen breder sig - nu fundet på Bornholm

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Berg, S. (Intern), Sivebæk, F. (Intern)
Publication date: 2012

Publication information
Source/Publisher: DTU Aqua
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/nyheder.aspx?guid=%7bBDD1B589-9B43-4672-979D-544223755902%7d
Publication: Communication › Internet publication – Annual report year: 2012

Can metabolic properties explain variation in individual behaviour?

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Ocean Ecology and Climate
Publication date: 2011
Event: Abstract from 1st International Conference on Fish Telemetry, Sapporo, Japan.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 281697
Publication: Research › Conference abstract for conference – Annual report year: 2011

Can metabolic properties explain variation in individual behaviour? Attempting to link physiology and morphology with field behavior

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Ocean Ecology and Climate
Publication date: 2011
Event: Abstract from 1st International Conference on Fish Telemetry, Sapporo, Japan.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279001
Publication: Research › Conference abstract for conference – Annual report year: 2011
Disturbance by human activities on fish individual behaviour in a small lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Bakttoft, H. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Skov, C. (Intern), Aarestrup, K. (Intern)
Publication date: 2011
Event: Abstract from World Recreational Fisheries Congress, Berlin, Germany.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 281696
Publication: Research › Conference abstract for conference – Annual report year: 2011

Geddeyngel skal have planter og lavt vand

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern), Olsen, J. S. (Ekstern), Michelsen, K. (Ekstern)
Publication date: 2011

Publication information
Source/Publisher: www.fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
Source: orbit
Source-ID: 276918
Publication: Communication › Internet publication – Annual report year: 2011

Non-indigenous signal crayfish Pacifastacus leniusculus is now common in Danish streams: Preliminary status for national distribution and protective actions

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Aarestrup, K. (Intern), Sivebæk, F. (Intern), Pedersen, S. (Intern), Vrålstad, T. (Ekstern), Berg, S. (Intern)
Pages: 1269-1274
Publication date: 2011
Main Research Area: Technical/natural sciences

Publication information
Journal: Biological Invasions
Volume: 13
Issue number: 6
ISSN (Print): 1387-3547
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 1.294 SNIP 1.193 CiteScore 2.71
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.444 SNIP 1.19 CiteScore 2.58
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 1.416 SNIP 1.402 CiteScore 2.78
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.553 SNIP 1.29 CiteScore 2.9
En sejlivet gammel dame takker af

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2010

Publication information
Source/Publisher: www.fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/nyheder.aspx?guid=%7b116FF639-4A16-4D12-AD7F-3BC12BC8C3F3%7d
Source: orbit
Source-ID: 259341
Publication: Communication › Internet publication – Annual report year: 2010

Ferskvandsfisk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Carl, H. (Ekstern), Berg, S. (Intern), Møller, P. R. (Ekstern), Rasmussen, G. (Intern), Nielsen, J. G. (Ekstern)
Publication date: 2010

Host publication information
Title of host publication: Den danske rødliste
Place of publication: Århus
Publisher: Aarhus Universitet. Danmarks Miljøundersøgelser
Generel information om gruppen Ferskvandsfisk

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Carl, H. (Ekstern), Berg, S. (Intern), Møller, P. R. (Ekstern), Rasmussen, G. (Intern), Nielsen, J. G. (Ekstern)
Publication date: 2010

**Host publication information**
Title of host publication: Den danske rødliste
Place of publication: Århus
Publisher: Aarhus Universitet. Danmarks Miljøundersøgelser
Main Research Area: Technical/natural sciences
Links:
http://www.dmu.dk/dyrplanter/redlistframe/
Source: orbit
Source-ID: 268960
Publication: Research › Book chapter – Annual report year: 2010

Gopler - og ikke fiskelarver

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2010

**Publication information**
Source/Publisher: www.fiskepleje.dk
Main Research Area: Technical/natural sciences
Links:
http://www.fiskepleje.dk/nyheder.aspx?guid=%7b95ED637F-C575-41DC-B64C-C82A41147B39%7d
Source: orbit
Source-ID: 263696
Publication: Communication › Internet publication – Annual report year: 2010

High salinity tolerance in eggs and fry of a brackish Esox lucius population

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Population Ecology and Genetics
Authors: Jørgensen, A. (Ekstern), Hansen, B. (Ekstern), Vismann, B. (Ekstern), Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern), Bekkevold, D. (Intern)
Pages: 554-560
Publication date: 2010
Main Research Area: Technical/natural sciences

**Publication information**
Journal: Fisheries Management and Ecology
Volume: 17
ISSN (Print): 0969-997X
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
Hvad fiskene laver i søen - døgnet rundt

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Lavt vand - en nødvendighed for geddeyngel

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern), Olsen, J. S. (Ekstern), Michelsen, K. (Ekstern)
Pages: 117-119
Publication date: 2010
Main Research Area: Technical/natural sciences

Ny liste over truede danske ferskvandsfisk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2010
Main Research Area: Technical/natural sciences

Turbiditet i søer - effekter på rov aborrens adfærd

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Andersen, M. (Intern), Skov, C. (Intern)
Publication date: 2010
Main Research Area: Technical/natural sciences

Aborrens yngel - også en glubsk lillie rovfisk
Environmental conditions and intraspecific interference: unexpected effects of turbidity on pike (Esox lucius) foraging

Interference among predators decreases per capita foraging rates and has implications for both community dynamics and top-down trophic processes. Interference originates from behavioural interactions among foragers, and these behaviours could be affected by environmental conditions. In experiments on pike foraging alone or among conspecifics in different levels of water turbidity, we expected high turbidity to decrease the perceived risk of intraspecific interactions among pike, and thereby decrease the strength of interference, as turbidity would decrease the visual contact between individuals and act as a refuge from behavioural interactions. The results show that this is not the case, but suggest that interference is induced instead of reduced in high turbidity. Per capita foraging rates do not differ between pike foraging alone or in groups in our clear and moderately turbid treatments, indicating no effect of interference. As high turbidity enhances prey consumption for pike individuals foraging alone, but does not have this effect for pike in groups, high turbidity induces the relative interference effect. We suggest that future evaluations of the stabilizing effects of interference on community dynamics and its reduction of predation impact on top-down trophic cascades should consider potential unexpected effects of environmental conditions.

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Nilsson, P. (Ekstern), Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern)
Pages: 33-38
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Ethology
Volume: 115
Issue number: 1
ISSN (Print): 0179-1613
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): SJR 0.823 SNIP 0.64 CiteScore 1.44
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.006 SNIP 0.808 CiteScore 1.82
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.896 SNIP 0.806 CiteScore 1.72
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.914 SNIP 0.765 CiteScore 1.76
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.037 SNIP 0.893 CiteScore 1.94
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 1.126 SNIP 0.874 CiteScore 2
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.066 SNIP 0.833
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 1.398 SNIP 0.993
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 1.192 SNIP 0.99
Scopus rating (2007): SJR 1.33 SNIP 0.949
Scopus rating (2006): SJR 1.213 SNIP 1.191
Scopus rating (2005): SJR 0.985 SNIP 0.839
Scopus rating (2004): SJR 1.191 SNIP 1.085
Scopus rating (2003): SJR 1.006 SNIP 0.947
Scopus rating (2002): SJR 1.292 SNIP 0.958
Scopus rating (2001): SJR 1.016 SNIP 0.963
Scopus rating (2000): SJR 0.94 SNIP 0.792
Scopus rating (1999): SJR 1.085 SNIP 0.964
Original language: English
DOIs:
10.1111/j.1439-0310.2008.01578.x
Source: orbit
Source-ID: 229079
Publication: Research - peer-review › Journal article – Annual report year: 2009

Gedder i brakvand - bestandsophjælpning ved udsætning

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern), Koed, A. (Intern), Larsen, P. F. (Intern)
Pages: 32-39
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisk og Hav
Issue number: 62
ISSN (Print): 0105-9211
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Links:
Netop nu gyder gedderne i vore søer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskepleje.dk
Original language: Danish
Links:
http://www.dtu.dk/Subsites/fiskepleje/nyheder.aspx?guid=%7b7B012703-0A08-4B3D-9B19-B281F18F7DB6%7d
Source: orbit
Source-ID: 241605
Publication: Communication › Journal article – Annual report year: 2009

New insights in pike behaviour

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Baktoft, H. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern), Aarestrup, K. (Intern), Skov, C. (Intern), Svendsen, J. C. (Intern)
Publication date: 2009
Event: Abstract from PhD Student Seminar, Søminestationen, Holbæk, Danmark, .
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 252607
Publication: Research › Conference abstract for conference – Annual report year: 2009

New insights in pike behaviour using 2D/3D telemetry

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Mathematical Statistics, Department of Informatics and Mathematical Modeling
Publication date: 2009
Event: Abstract from 8th Conference on Fish Telemetry held in Europe; Umeå, Sweden; September 14-18, .
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 252533
Publication: Research › Conference abstract for conference – Annual report year: 2009

Nye fund af signalkrebs i den danske natur

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern)
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskepleje.dk
Original language: Danish
Piscivory and trophic position of Anguilla anguilla in two lakes: importance of macrozoobenthos density

The feeding habits of the European eel Anguilla anguilla (> 300 mm total length, L-T) were compared in two lakes of different environmental state: Lake Grosser Vatersee (LGV), Germany (clear water, mesotrophic and submerged macrophytes), and Lake Vallum (LV), Denmark (turbid, eutrophic and no submerged macrophytes). The density of macrozoobenthos was higher in LV (3500 individuals m(-2)) than in LGV (1500 individuals m(-2)). The abundance of small prey fishes (40-99 mm L-T) was highest in LV. In LV, A. anguilla fed on macrozoobenthos, in particular, chironomid larvae. In LGV, A. anguilla used fishes as the main food component. Stable isotope analyses confirmed the stomach contents dietary results. The estimated mean +/- s.d. trophic positions of A. anguilla in LGV (3 center dot 7 +/- 0 center dot 2) was one level higher than those of fish in LV (2 center dot 7 +/- 0 center dot 2). Based on these results, it is concluded that piscivory among A. anguilla was generally controlled by the density of macrozoobenthos. Stable isotope analysis further indicated that A. anguilla may act as integrators between benthic and pelagic food webs when density of insect larvae is low.

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Dorner, H. (Ekstern), Skov, C. (Intern), Berg, S. (Intern), Schultze, T. (Ekstern), Beare, D. (Ekstern), Van der Velde, G. (Ekstern)
Pages: 2115-2131
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Fish Biology
Volume: 74
Issue number: 9
ISSN (Print): 0022-1112
Ratings: BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.57 SJR 0.741 SNIP 0.882
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.951 SNIP 0.935 CiteScore 1.64
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.944 SNIP 0.934 CiteScore 1.76
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.049 SNIP 1.118 CiteScore 1.98
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.035 CiteScore 1.88
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.895 SNIP 0.946 CiteScore 1.66
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
Restoring lakes by using artificial plant beds: habitat selection of zooplankton in a clear and a turbid shallow lake

1. Return of large-bodied zooplankton populations is of key importance for creating a shift from a turbid to a clear-water state in shallow lakes after a nutrient loading reduction. In temperate lakes, recovery is promoted by submerged macrophytes which function as a daytime refuge for large zooplankton. However, recovery of macrophytes is often delayed and use of artificial plant beds (APB) has been suggested as a tool to enhance zooplankton refuges, thereby reinforcing the shift to a clear-water state and, eventually, colonisation of natural plants. 2. To further evaluate the potential of APB in lake restoration, we followed the day–night habitat choices of zooplankton throughout summer in a clear and a turbid lake. Observations were made in the pelagic and littoral zones and in APB in the littoral representing three different plant densities (coverage 0%, 40% and 80%). 3. In the clear lake, the zooplankton (primarily Daphnia) were mainly found in the pelagic area in spring, but from mid-May they were particularly abundant in the APB and almost exclusively so in mid-June and July, where they appeared in extremely high densities during day (up to 2600 ind. L⁻¹). During night Daphnia densities were overall more equally distributed between the five habitats. Ceriodaphnia was proportionally more abundant in the APB during most of the season. Cyclopoids were more abundant in the pelagic during day but were equally distributed between the five habitats during night. 4. In the turbid lake, however, no clear aggregation was observed in the APB for either of the pelagic genera (Daphnia and Bosmina). This may reflect a higher refuge effect in the open water due to the higher turbidity, reduced ability to orient to plant beds and a significantly higher fish density (mainly of roach, Rutilus rutilus, and perch, Perca fluviatilis) in the plant beds than in the clear lake. Chydorus was found in much higher proportions among the plants, while cyclopoids, particularly the pelagic Cyclops vicinus, dominated in the pelagic during day and in the pelagic and high density plants during night. 5. Our results suggest that water clarity is decisive for the habitat choice of large-bodied zooplankton and that introduction of APB as a restoration measure to enhance zooplankton survival is only a useful tool when water clarity increases following loading reduction. Our results indicate that dense APB will be the most efficient.
Migration, lake restoration, artificial plant beds, zooplankton, habitat choice
Revision af bekendtgørelse

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 9
Publication date: 2009
Main Research Area: Technical/natural sciences

Publication information
Journal: Fritidsfiskeren
Volume: 29
Issue number: 2
ISSN (Print): 0906-7752
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 241532
Publication: Communication › Journal article – Annual report year: 2009

Catch & release med omtanke

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Sivebæk, F. (Intern), Berg, S. (Intern)
Pages: 86-90
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Sportsfiskeren
Volume: 83
Issue number: 4
ISSN (Print): 0038-8211
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Electronic versions:
Sportsfiskeren_2008.pdf
Source: orbit
Source-ID: 227424
Publication: Research › Journal article – Annual report year: 2008

Fiskebestanden i Fuglsang Sø 2007: Rapport til Herning Kommune udarbejdet af DTU Aqua

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Number of pages: 24
Fiskebestanden i sjælden sætype undersøgt

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern)
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: www.skovognatur.dk
Original language: Danish
Links:
http://www.skovognatur.dk/Lokalt/Soehoejlandet/Nyheder/Fiskeriundersoegelse.htm
Source: orbit
Source-ID: 224902
Publication: Research › Journal article – Annual report year: 2008

Flyvende fisk i kunstig sø

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Brandt, S. (Ekstern)
Pages: 155-158
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Vand og Jord
Volume: 15
Issue number: 4
ISSN (Print): 0908-7761
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 239810
Publication: Research › Journal article – Annual report year: 2008

Fremmede fisk i søen

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Bertelsen, K. (Ekstern), Berg, S. (Intern), Carl, H. (Ekstern)
Pages: 38
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Køkkenvindue med udsigt til store gedder

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern), Sivebæk, F. (Intern)
Pages: 82-84
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: Sportsfiskeren
Volume: 83
Issue number: 4
ISSN (Print): 0038-8211
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Electronic versions:
Sportsfiskeren_maj_2008.pdf
Source: orbit
Source-ID: 227443
Publication: Communication › Journal article – Annual report year: 2008

Optur og nedtur – det er ikke let at være sandart

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskepleje.dk
Original language: Danish
Links:
http://www.fiskepleje.dk/
Source: orbit
Source-ID: 232410
Publication: Research › Journal article – Annual report year: 2008

Proceedings of the Seventh Conference on Fish Telemetry held in Europe

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern), Aarestrup, K. (Intern), Pedersen, M. I. (Intern)
Pages: 331-331
Sandart

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Koed, A. (Intern)
Publication date: 2008
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskepleje.dk
Original language: Danish
Links: http://www.fiskepleje.dk/fiskebiologi/sandart.aspx
Source: orbit
Source-ID: 229081
Publication: Research › Journal article – Annual report year: 2008

Udsætning af geddeyngel som bestandsophjælpening i danske brakvandsområder – effektvurdering og perspektivering

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern), Koed, A. (Intern), Larsen, P. F. (Intern)
Number of pages: 54
Publication date: 2008

Publication information
Place of publication: Silkeborg
Publisher: DTU Aqua. Institut for Akvatiske Ressourcer
ISBN (Print): 87-74-81086-5
Original language: Danish

Series: DTU Aqua-rapport
Number: 196-08
Main Research Area: Technical/natural sciences
Electronic versions: 196_08_elektronisk_samlet.pdf
Links: http://www.aqua.dtu.dk/Publikationer/Forskningsrapporter/Forskningsrapporter_siden_2008
Source: orbit
Source-ID: 229082
Publication: Research › Report – Annual report year: 2008

Formlen til at beregne kræbs i en sø

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 18-26
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: Flodkrebsen
Volume: 17
Restaurering af søer: Udsætning af gedder

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Population Ecology and Genetics
Authors: Skov, C. (Intern), Berg, S. (Intern), Jacobsen, L. (Intern), Bekkevold, D. (Intern), Olsen, J. (Ekstern)
Pages: 129-134
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: Vand og jord
Volume: 4
ISSN (Print): 0908-7761
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 227449
Publication: Research › Journal article – Annual report year: 2007

Short-term salinity tolerance of northern pike, Esox lucius, fry, related to temperature and size
The short-term tolerances of northern pike, Esox lucius L., fry reared in a freshwater hatchery, to salinity were examined in the laboratory. Survival of two size groups of pike fry (mean length 21 +/- 2 mm SD and 37 +/- 4 mm SD) was examined over 72- to 96-h periods at 9-14 ppt salinity in combination with temperatures of 10, 14 and 18 degrees C. A parametric survival model found a significant correlation between survival of pike fry and temperature and salinity, respectively. L(C)50 values after 72 h were between 11.2 and 12.2 ppt, being lowest at 10 degrees C. Pike fry did not survive more than 13 ppt. Mortality at 12 ppt was significantly faster at 18 degrees C than 10 or 14 degrees C. Moreover, mortality was higher and faster for large than for small pike fry at 12 ppt and 14 degrees C. These results imply that pike raised in fresh water can survive stocking into brackish waters below 11 ppt at least for a short time.

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Koed, A. (Intern), Berg, S. (Intern)
Pages: 303-308
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Management and Ecology
Volume: 14
Issue number: 5
ISSN (Print): 0969-997X
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.85 SJR 0.843 SNIP 0.88
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.988 SNIP 1.159 CiteScore 1.91
Signalkrebsen spreder sig

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Sivebæk, F. (Intern), Berg, S. (Intern)
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskepleje.dk
Original language: Danish
Status for Atlas over danske ferskvandsfisk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Carl, H. (Ekstern), Berg, S. (Intern), Møller, P. (Ekstern), Nielsen, J. (Ekstern), Rasmussen, G. (Intern)
Number of pages: 46
Publication date: 2007

Publication information
Place of publication: København
Publisher: Zoologisk Museum og Danmarks Fiskeriundersøgelser
Original language: Danish
Main Research Area: Technical/natural sciences
Links:
Source: orbit
Source-ID: 225087
Publication: Research › Report – Annual report year: 2007

Status for Atlas over danske ferskvandsfisk. Version II

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Carl, H. (Ekstern), Berg, S. (Intern), Møller, P. (Ekstern), Nielsen, J. (Ekstern), Rasmussen, G. (Intern)
Number of pages: 40
Publication date: 2007

Publication information
Place of publication: København
Publisher: Zoologisk Museum og Danmarks Fiskeriundersøgelser
Original language: Danish
Main Research Area: Technical/natural sciences
Links:
http://www.fiskeatlas.dk/download/Statusrapport2.pdf
Source: orbit
Source-ID: 225088
Publication: Research › Report – Annual report year: 2007

Tilskud til udsætning af krebs

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 22-26
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: Flodkrebsen
Volume: 17
Issue number: 2
Original language: Danish
Source: orbit
Source-ID: 224928
Truer karpen vandmiljøet

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern), Sivebæk, F. (Intern), Carl, H. (Ekstern)
Pages: 6-7
Publication date: 2007
Main Research Area: Technical/natural sciences

Publication information
Journal: Sportsfiskeren.dk
Volume: 82
Issue number: 7
Original language: Danish
Source: orbit
Source-ID: 224929
Publication: Research › Journal article – Annual report year: 2007

Danmarks ferskvandsfisk skal kortlægges

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Carl, H. (Ekstern)
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication information
Journal: fiskepleje.dk
Original language: Danish
Links:
http://dmz-web04/fiskepleje/fiskeatlas.htm
Source: orbit
Source-ID: 224892
Publication: Communication › Journal article – Annual report year: 2007

En kort gennemgang af reglerne for fiskeri i ferskvand

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication information
Journal: www.fiskeatlas.dk
Original language: Danish
Links:
Source: orbit
Source-ID: 224895
Publication: Research › Journal article – Annual report year: 2006

Fiskebestanden i Torup Sø 2006

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Gedder i de indre søer 2005 - habitatforbedring og naturlig gydning

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern)
Number of pages: 13
Publication date: 2006

Publication information
Publisher: [s.n.]
Original language: Danish
Main Research Area: Technical/natural sciences

Bibliographical note
Rapport til Vejle Amt
Source: orbit
Source-ID: 224905
Publication: Research › Report – Annual report year: 2006

Gedder i søredningstjeneste: Læserbrev

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Number of pages: 13
Publication date: 2006

Publication information
Publisher: [s.n.]
Original language: Danish
Main Research Area: Technical/natural sciences

Bibliographical note
Rapport til Københavns kommune
Source: orbit
Source-ID: 224912
Publication: Research › Report – Annual report year: 2006

Migration patterns of brackish water pikes in South Denmark

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern), Koed, A. (Intern)
Number of pages: 13
Publication date: 2006
Event: Abstract from Pike Symposium at the American Fisheries Society annual meeting, Lake Placid, USA,
Nyt syn på udsætning af geddeyngel

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern)
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication information
Journal: fiskepleje.dk
Original language: Danish
Links:
http://www.fiskepleje.dk/default.asp?getreq=%2Fgedderapport%2Ehtm

Preface to the Silkeborg conference issue

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Koed, A. (Intern), Aarestrup, K. (Intern), Skov, C. (Intern), Jepsen, N. (Intern), Berg, S. (Intern)
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication information
Journal: Ecology of Freshwater Fish
Volume: 15
Issue number: 2
ISSN (Print): 0906-6691
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.66 SJR 0.804 SNIP 0.885
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.022 SNIP 1.192 CiteScore 1.92
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.866 SNIP 0.994 CiteScore 1.58
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.971 SNIP 1.072 CiteScore 1.77
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.061 SNIP 1.247 CiteScore 2.05
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
Restauration of De Indre Søer in København, did it go well or badly?

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Michelsen, K. (Ekstern)
Pages: 16773-16774
Publication date: 2006
Main Research Area: Technical/natural sciences

Publication Information
Journal: Lystfiskeri-tidende
Volume: 118
Issue number: 1153
Original language: Danish
Source: orbit
Source-ID: 224922
Publication: Communication › Journal article – Annual report year: 2006

Stizostedion lucioperca

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Larsen, L. (Ekstern), Berg, S. (Intern)
Pages: 1-8
Stort projekt skal kortlægge Danmarks ferskvandsfisk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Carl, H. (Ekstern)
Pages: 16-19
Publication date: 2006
Main Research Area: Technical/natural sciences

The diet of large eels in relation to food availability

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Dörner, H. (Ekstern), Skov, C. (Intern), Berg, S. (Intern), Schulze, T. (Ekstern), Beare, D. (Ekstern), Van der Velde, G. (Ekstern)
Pages: 1-30
Publication date: 2006
Main Research Area: Technical/natural sciences

Host publication information
Title of host publication: NOBANIS - Invasive alien species fact sheet
Series: Online database of the North European and Baltic Network on Invasive Alien Species
Main Research Area: Technical/natural sciences
Links:
Source: orbit
Source-ID: 226414
Publication: Research - peer-review › Book chapter – Annual report year: 2006
Biomanipulation by pike stocking: cross analysis of 8 Danish restoration projects

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 2005
Event: Abstract from Shallow lakes in a changing world, Dalfsen, The Netherlands
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279382
Publication: Research › Conference abstract for conference – Annual report year: 2005

Er det biologisk relevant at have mindstemål og fredningstider i Put & Take søer?

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Publication date: 2005
Main Research Area: Technical/natural sciences

**Publication information**
Journal: www.fiskepleje.dk
Original language: Danish
Links:
http://www.fiskepleje.dk/
Source: orbit
Source-ID: 224896
Publication: Research › Journal article – Annual report year: 2005

Fiskebestanden i Torup Sø 2004

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Number of pages: 9
Publication date: 2005

**Publication information**
Place of publication: Vejle
Publisher: Vejle Amt
Original language: Danish
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224904
Publication: Research › Report – Annual report year: 2005

Gedder i de Indre Søer 2004 - habitatforbedring, udsætning og naturlig gydning

**General information**
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Olsen, J. (Ekstern), Berg, S. (Intern), Skov, C. (Intern)
Number of pages: 22
Publication date: 2005

**Publication information**
Place of publication: København
Publisher: BST Københavns Kommune
Original language: Danish
Migration patterns of brackish water pikes in South Denmark

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern), Koed, A. (Intern)
Publication date: 2005
Event: Abstract from Telemetry Conference to be held in Europe, Sesimbra, Portugal.
Main Research Area: Technical/natural sciences

Does roach behaviour differ between shallow lakes of different environmental state?

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Jepsen, N. (Intern), Skov, C. (Intern)
Pages: 135-147
Publication date: 2004
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Fish Biology
Volume: 65
Issue number: 1
ISSN (Print): 0022-1112
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.57 SJR 0.741 SNIP 0.882
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.951 SNIP 0.935 CiteScore 1.64
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.944 SNIP 0.934 CiteScore 1.76
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.049 SNIP 1.118 CiteScore 1.98
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.035 CiteScore 1.88
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.895 SNIP 0.946 CiteScore 1.66
ISI indexed (2011): ISI indexed yes
Effect of turbidity on habitat selection and activity of fish in shallow lakes during a year

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern), Jepsen, N. (Intern)
Publication date: 2004
Event: Abstract from International Conference on Behaviour and ecology of freshwater fish, linking ecology and individual behaviour, Silkeborg, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 225919
Publication: Research › Conference abstract for conference – Annual report year: 2004

Fiskebestanden i Torup Sø 2002

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Number of pages: 7
Publication date: 2004

Publication information
Publisher: [s.n.]
Original language: Danish
How to link biomanipulation and sustainable fisheries management: a step-by-step guideline for lakes of the European temperate zone

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Pages: 261-275
Publication date: 2004
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Management and Ecology
Volume: 11
Issue number: 3-4
ISSN (Print): 0969-997X
Ratings:
BFI (2018): BFI-level 1
Hvordan går det med gedderne i Stege Nor og Bredningen

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern)
Management of lake fish populations and lake fisheries in Denmark: History and current status

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern)
Pages: 219-224
Publication date: 2004
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisheries Management and Ecology
Volume: 11
Issue number: 3-4
ISSN (Print): 0969-997X
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.85 SJR 0.843 SNIP 0.88
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.988 SNIP 1.159 CiteScore 1.91
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.913 SNIP 0.995 CiteScore 1.85
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.737 SNIP 0.807 CiteScore 1.36
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.636 SNIP 0.868 CiteScore 1.32
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.844 SNIP 0.932 CiteScore 1.29
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.847 SNIP 0.808
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Otolith-based analysis of survival and size-selective mortality of stocked 0+ year pike related to time of stocking

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Grønkjær, P. (Ekstern), Skov, C. (Intern), Berg, S. (Intern)
Pages: 1625-1637
Publication date: 2004
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Fish Biology
Volume: 64
Issue number: 6
ISSN (Print): 0022-1112
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.57 SJR 0.741 SNIP 0.882
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.951 SNIP 0.935 CiteScore 1.64
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.944 SNIP 0.934 CiteScore 1.76
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.049 SNIP 1.118 CiteScore 1.98
Søerne i Nordjyllands og Viborg amter

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Høy, T. (Ekstern), Noe Markmann, P. (Ekstern), Sivebæk, F. (Intern), Berg, S. (Intern)
Number of pages: 335
Publication date: 2004

Publication information
Place of publication: København
Publisher: Strandbergs Forlag
ISBN (Print): 87-77-17200-0
Original language: Danish

Series: Danmarks søer:
Udsættning af geddeyngel i Københavns indre søer 2003: Overlevelse, habitatvalg, fødevalg, vækst og afledte effekter

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Olsen, J. (Ekstern), Berg, S. (Intern), Skov, C. (Intern)
Number of pages: 17
Publication date: 2004

Publication information
Publisher: [s.n.]
Original language: Danish
Main Research Area: Technical/natural sciences

Bibliographical note
Rapport udarbejdet for Københavns Kommune
Source: orbit
Source-ID: 226974
Publication: Research › Report – Annual report year: 2004

Erfaringer med udsætninger af geddeyngel

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern)
Pages: 16135-16138
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Lystfiskeri-tidende
Volume: 115
Issue number: 1117
ISSN (Print): 0904-5414
Original language: Danish
Source: orbit
Source-ID: 227426
Publication: Research › Journal article – Annual report year: 2003

Fiskebestande, biomanipulation og fiskepleje

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern)
Pages: 7-11
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Miljø og vandpleje
Original language: Danish
Source: orbit
Source-ID: 224900
Publication: Research › Journal article – Annual report year: 2003
Mærkning af store gedder i Stege Nor

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Skov, C. (Intern), Berg, S. (Intern)
Pages: 29
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Amatørfiskeren
Volume: 23
Issue number: 3
ISSN (Print): 0900-2650
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 225930
Publication: Research › Journal article – Annual report year: 2003

Piscivory of 0+ pike (Esox lucius L.) in a small eutrophic lake and its implication for biomanipulation

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Lousdal, O. (Ekstern), Berg, S. (Intern), Johansen, P. (Ekstern)
Pages: 481-487
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 506
Issue number: 1-3
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.22
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.02
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.13
ISI indexed (2012): ISI indexed yes
Post-stocking survival of 0+ year pike in ponds as a function of water transparency, habitat complexity, prey availability and size heterogeneity

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern)
Pages: 311-322
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Fish Biology
Volume: 62
Issue number: 2
ISSN (Print): 0022-1112
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.57 SJR 0.741 SNIP 0.882
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.951 SNIP 0.935 CiteScore 1.64
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.944 SNIP 0.934 CiteScore 1.76
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.049 SNIP 1.118 CiteScore 1.98
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.035 CiteScore 1.88
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
Projekt "Våde enge"

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Koed, A. (Intern), Rasmussen, G. (Intern), Berg, S. (Intern)
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: http://www.fiskepleje.dk
Original language: Danish
Links:
http://130.226.135.19/fiskepleje/vaadeenge2.htm
Source: orbit
Source-ID: 226263
Publication: Research › Journal article – Annual report year: 2003

Projekt "Våde enge"
Spatial and temporal distribution of fish and zooplankton in a shallow lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Romare, P. (Ekstern), Berg, S. (Intern), Lauridsen, T. (Ekstern), Jeppesen, E. (Ekstern)
Pages: 1353-1362
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Freshwater Biology
Volume: 48
Issue number: 8
ISSN (Print): 0046-5070
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.36 SJR 1.568 SNIP 1.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.537 SNIP 1.371 CiteScore 2.95
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.487 SNIP 1.473 CiteScore 3.03
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 2.045 SNIP 1.9 CiteScore 4.02
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 2.075 SNIP 1.755 CiteScore 3.76
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.927 SNIP 1.628 CiteScore 3.33
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 2
The feeding behaviour of large perch (Perca fluviatilis L.) in relation to food availability: a comparative study

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Dörner, H. (Ekstern), Berg, S. (Intern), Jacobsen, L. (Intern), Hülsmann, S. (Ekstern), Broberg, M. (Ekstern), Wagner, A. (Ekstern)
Pages: 427-434
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 506
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.22
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.02
ISI indexed (2013): ISI indexed yes
Udsætning af geddeyngel i Københavns indre søer 2002: Overlevelse, habitatvalg, vækst, fødevalg og afledte effekter

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern)
Number of pages: 15
Publication date: 2003

Publication information
Place of publication: København
Publisher: BST Københavns Kommune
Original language: Danish
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 227452
Publication: Research › Report – Annual report year: 2003

Vandmiljøplan II - anbefalinger i relation til laks og ørred

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Institute Management
Authors: Koed, A. (Intern), Rasmusssen, G. (Intern), Berg, S. (Intern)
Pages: 243-247
Publication date: 2003
Main Research Area: Technical/natural sciences

Publication information
Journal: Ferskvandsfiskeribladet
Volume: 101
Issue number: 11
ISSN (Print): 0015-0223
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
A comparative study on determining fish numbers and biomass in lakes: Five methods compared with the true answer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Publication date: 2002
Event: Poster session presented at EIFAC Symposium on Inland Fisheries Management and the Aquatic Environment, Windermere, United Kingdom.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279397
Publication: Research › Poster – Annual report year: 2002

Activity and food choice of piscivorous perch (Perca fluviatilis) in a eutrophic shallow lake: a radio-telemetry study

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Broberg, M. (Ekstern), Jepsen, N. (Intern), Skov, C. (Intern)
Pages: 2370-2379
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: Freshwater Biology
Volume: 47
Issue number: 12
ISSN (Print): 0046-5070
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.36 SJR 1.568 SNIP 1.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.537 SNIP 1.371 CiteScore 2.95
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.487 SNIP 1.473 CiteScore 3.03
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 2.045 SNIP 1.9 CiteScore 4.02
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 2.075 SNIP 1.755 CiteScore 3.76
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.927 SNIP 1.628 CiteScore 3.33
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 1.736 SNIP 1.525
Anbefalinger for fiskeudsætninger i Danmark

General information
State: Published
Organisations: Section for Population Ecology and Genetics, National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Hansen, M. M. (Intern), Berg, S. (Intern), Sivebæk, F. (Intern)
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: http://www.fiskepleje.dk
Original language: Danish
Links:
http://www.dfu.min.dk/fiskepleje/moerkningaffisk.htm
Source: orbit
Source-ID: 225915
Publication: Research - peer-review › Journal article – Annual report year: 2002

Behaviour of piscivorous perch, invistigated by radio telemetry

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern), Broberg, M. (Ekstern), Jepsen, N. (Intern), Skov, C. (Intern)
Publication date: 2002
International Conference on Limnology of shallow lakes, .
Main Research Area: Technical/natural sciences

Source: orbit
Source-ID: 279387
Publication: Research › Conference abstract for conference – Annual report year: 2002

Changes in the fish community and water quality during seven years of stocking piscivorous fish in a shallow lake
1. Piscivores (annual stocking of 1000 individuals ha(-1) of 0+ pike and a single stocking of 30 kg ha(-1) of large 20-30 cm perch) were stocked in seven consecutive years in a shallow eutrophic lake in Denmark. The stocking programme aimed at changing food-web structure by reducing zooplanktivorous and benthivorous fish, with resultant effects on lower trophic
levels and ultimately water quality. 2. The fish community and water quality parameters (Secchi depth, concentrations of total phosphorus, chlorophyll a and suspended solids) were monitored between 1996 and 2000 and relationships were evaluated between predatory fish and potential prey and between zooplanktivorous or benthivorous fish and water quality parameters. In addition, potential consumption of piscivorous fishes was calculated. 3. The density of fish feeding on larger zooplankton or benthos (roach >15 cm, crucian carp >15 cm) declined distinctly during the study period. This effect was attributed to predation by large (>50 cm) pike. Based on scale readings, we cautiously suggest that the stocking of 0+ pike boosted the adult pike population to produce an unexpected impact in later years. Conversely, no direct impact of stocked 0+ pike was detected on 0+ roach. 4. A major decline in the recruitment strength of 0+ roach was observed in 2000. A combination of (i) the indirect effect of large pike preying on adult roach, with negative effect on roach reproduction and (ii) the direct predation effect of 0+ pike and or 1+ and 2+ perch recruited in the lake, provides the most likely explanation of this phenomenon. 5. A marked increase in Secchi depth in 2000 and declining trends in suspended solids, chlorophyll-a and total phosphorus concentrations were observed. These changes may also be attributable to changes in the fish community, although the relationships were not straightforward. 6. This 7-year study indicates that piscivorous fish may be a significant structuring force in shallow eutrophic lakes, suggesting that stocking piscivores can increase predation pressure on cyprinids. However, the general lack of impact of 0+ pike points to the need of refining current stocking practices in several countries across Europe.

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Perrow, M. (Ekstern), Berg, S. (Intern), Skovgaard, H. (Ekstern)
Pages: 2388-2400
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: Freshwater Biology
Volume: 47
Issue number: 12
ISSN (Print): 0046-5070
Ratings:
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Web of Science (2017): Indexed Yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 3.36 SJR 1.568 SNIP 1.41
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): SJR 1.537 SNIP 1.371 CiteScore 2.95
BFI (2014): BFI-level 2
Scopus rating (2014): SJR 1.487 SNIP 1.473 CiteScore 3.03
BFI (2013): BFI-level 2
Scopus rating (2013): SJR 2.045 SNIP 1.9 CiteScore 4.02
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): SJR 2.075 SNIP 1.755 CiteScore 3.76
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): SJR 1.927 SNIP 1.628 CiteScore 3.33
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 1.736 SNIP 1.525
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 1.734 SNIP 1.514
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 1.618 SNIP 1.502
Web of Science (2008): Indexed yes
Fish sampling by the Artificial Vegetation Module (AVM) system

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Jacobsen, L. (Intern), Berg, S. (Intern), Jeppesen, E. (Ekstern), Søndergaard, M. (Ekstern), Lauridsen, T. (Ekstern)
Publication date: 2002
Event: Poster session presented at EIFAC Symposium on Inland Fisheries Management and the Aquatic Environment, Windermere, United Kingdom.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279398
Publication: Research › Poster – Annual report year: 2002

Fiskebestanden i Saltbæk Vig 2001 : Udvikling, nuværende status og dens betydning for søens miljøtilstand

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern)
Number of pages: 21
Publication date: 2002

Publication information
Publisher: A/S Saltbæk Vig
Original language: Danish
Main Research Area: Technical/natural sciences

Bibliographical note
Rapport udarb. af DFU for A/S Saltbæk Vig
Source: orbit
Source-ID: 227428
Publication: Research › Report – Annual report year: 2002

Fiskebiologi

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Sivebæk, F. (Intern), Skov, C. (Intern), Pedersen, M. I. (Intern), Jacobsen, L. (Intern), Koed, A. (Intern), Berg, S. (Intern)
Publication date: 2002
Main Research Area: Technical/natural sciences
Habitat use and foraging success of 0+ pike (Esox lucius L.) in experimental ponds related to prey fish, water transparency and light intensity

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern), Jacobsen, L. (Intern), Jepsen, N. (Intern)
Pages: 65-73
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: Ecology of Freshwater Fish
Volume: 11
Issue number: 2
ISSN (Print): 0906-6691
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.66 SJR 0.804 SNIP 0.885
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 1.022 SNIP 1.192 CiteScore 1.92
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.866 SNIP 0.994 CiteScore 1.58
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 0.971 SNIP 1.072 CiteScore 1.77
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 1.061 SNIP 1.247 CiteScore 2.05
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.979 SNIP 0.887 CiteScore 1.65
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Large perch (Perca fluviatilis L.) as predators: seasonal patterns ans size selective feeding on young fish in two shallow lakes of different environmental state

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Dörner, H. (Ekstern), Berg, S. (Intern), Broberg, M. (Ekstern), Jacobsen, L. (Intern), Wagner, A. (Ekstern)
Publication date: 2002
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279388
Publication: Research › Conference abstract for conference – Annual report year: 2002

Management of lake fish populations and lake fisheries in Denmark : History and current status

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern)
Conference: EIFAC Symposium on Inland Fisheries Management and the Aquatic Environment, Windermere, United Kingdom, 12/06/2002 - 12/06/2002
Main Research Area: Technical/natural sciences
Publication information
Journal: EIFAC/XXII/2002/Symposium
Volume: E07
Original language: English
Source: orbit
Prøvefiskeri efter krebs - hvordan beregner man bestandens størrelse?

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 9-13
Publication date: 2002
Main Research Area: Technical/natural sciences

Roach (Rutilus rutilus) behaviour by use of mini-radio transmitters: a comparative study of a clearwater lake and a turbid lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Jepsen, N. (Intern), Berg, S. (Intern)
Publication date: 2002
Main Research Area: Technical/natural sciences

The use of winter refuges by roach tagged with miniature radio transmitters

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jepsen, N. (Intern), Berg, S. (Intern)
Pages: 167-173
Publication date: 2002
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 483
Issue number: 1-3
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Den biologiske begrundelse for fredningstid på laks og havørred

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 29
Publication date: 2001
Main Research Area: Technical/natural sciences

Publication information
Journal: Amatørfiskeren
Volume: 21
Issue number: 2
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 224893
Publication: Communication › Journal article – Annual report year: 2001

Søerne i Fyns amt

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Høy, T. (Ekstern), Berg, S. (Intern), Dahl, J. (Ekstern), Markmann, S. (Ekstern), Markmann, P. (Ekstern), Sivebæk, F. (Intern)
Number of pages: 159
Publication date: 2001

Publication information
Place of publication: Vedbæk
Publisher: Strandbergs Forlag
ISBN (Print): 87-77-17168-3
Original language: Danish

Series: Danmarks søer:
Number: 5
Main Research Area: Technical/natural sciences

Bibliographical note
Af Thorkild Høy med bidrag af Søren Berg, Jørgen Dahl, Susse Mohr Markmann, Peter Noe Markmann og Finn Sivebæk
Source: orbit
Source-ID: 225870
Publication: Research - peer-review › Book – Annual report year: 2001

Artificial Vegetation Module (AVM) system; A new technique for fish sampling and experimental designing

General information
Effect of piscivorous fish on stickleback behaviour in a eutrophic brackish lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern), Skov, C. (Intern)
Publication date: 2000
Event: Poster session presented at ASLO 2000 Aquatic Science Meeting, Research Across Boundaries, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279401
Publication: Research › Poster – Annual report year: 2000

Fisk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 122-133
Publication date: 2000

Host publication information
Title of host publication: Naturtyper og arter omfattet af EF-Habitatdirektiv. Indledende kortlægning og foreløbig vurdering af bevaringsstatus
Place of publication: Kalo
Publisher: Danmarks Miljøundersøgelser
Editors: Pihl, S., Ejrnæs, R., Sagaard, B., Aude, E., Nielsen, K., Dahl, K., Laursen, S.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224899
Publication: Research › Book chapter – Annual report year: 2000

Fiskeplejens forskning i søer gennem 12 år

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Skov, C. (Intern), Jacobsen, L. (Intern)
Pages: 46-53
Publication date: 2000
Main Research Area: Technical/natural sciences

Publication information
Journal: Fisk og Hav
Issue number: 51
ISSN (Print): 0105-9211
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
Fiskerloven

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Number of pages: 21
Publication date: 2000

Host publication information
Title of host publication: Vandmiljøplan II. Genoprettning af vådområder. 1. Rammer og lovgivning
Volume: 2.13
Place of publication: København
Publisher: Skov- og Naturstyrelsen
Editor: Andersen, V.
ISBN (Print): 87-7279-226-4
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224908
Publication: Research › Book chapter – Annual report year: 2000

Konsekvenser, dyre -og planteliv

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 20-23
Publication date: 2000

Host publication information
Title of host publication: Vandmiljøplan II. Genoprettning af vådområder. 3. Projektforløb
Volume: 5.6
Place of publication: København
Publisher: Skov- og Naturstyrelsen
Editor: Andersen, V.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224917
Publication: Research › Book chapter – Annual report year: 2000

Movements of large perch (Perca fluviatilis) in a shallow lake, investigated by radio telemetry

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern), Skov, C. (Intern)
Publication date: 2000
Event: Poster session presented at International Symposium and Workshop on Management and Ecology of Lake and Reservoir Fisheries, Hull, United Kingdom.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279399
Publication: Research › Poster – Annual report year: 2000
Six years of stocking with piscivores in a shallow eutrophic lake: Changes in fish population and lake environment

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern), Jacobsen, L. (Intern)
Publication date: 2000
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279390
Publication: Research › Conference abstract for conference – Annual report year: 2000

The fish population of the re-established Lake Oldenor: Natural invasion, management and effects on the ecosystem

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Mæhl, P. (Ekstern), Jacobsen, L. (Intern)
Publication date: 2000
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279391
Publication: Research › Conference abstract for conference – Annual report year: 2000

Der Nordseeschnäpel - eine vergessene Fischart?

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Scheffel, H. (Ekstern), Berg, S. (Intern), Grøn, P. (Ekstern)
Pages: 74-75
Publication date: 1999

Host publication information
Title of host publication: Wattenmeer zwischen Elb- und Emsmündung
Place of publication: Stuttgart
Publisher: Verlag Ulmer
Editors: Henke, S., Roy, M.
ISBN (Print): 38-00-13492-6

Series: Umweltatlas Wattenmeer
Number: 2
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 227328
Publication: Research - peer-review › Book chapter – Annual report year: 1999

Freshwater crayfish in Denmark: species, diseases, legislation and management

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Styrisheave, B. (Ekstern), Berg, S. (Intern), Boisen, B. (Ekstern)
Pages: 11-18
Publication date: 1999

Host publication information
Title of host publication: Nordic-Baltic Workshop on Crayfish Research and Management
**Postglacial recolonization patterns and genetic relationships among whitefish (Coregonus sp.) populations in Denmark, inferred from mitochondrial DNA and microsatellite markers**

The genetic relationships among morphologically and geographically divergent populations of whitefish (genus: Coregonus) from Denmark and the Baltic Sea region were studied by analysis of microsatellites and polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) analysis of mitochondrial DNA (mtDNA) segments. The endangered North Sea houting (classified as C. oxyrhynchus) differs morphologically and physiologically from other Danish whitefish (C. lavaretus). However, limited divergence of North Sea houting was observed both at the level of mtDNA and microsatellites. The implications of these results for the conservation status of North Sea houting are discussed in the light of current definitions of evolutionary significant units. Both mtDNA and microsatellite data indicated that postglacial recolonization by C. lavaretus in Denmark was less likely to have taken place from the Baltic Sea. Instead, the data suggested a recent common origin of all Danish whitefish populations, including North Sea houting, probably by recolonization via the postglacial Elbe River system. Estimates of genetic differentiation among populations based on mtDNA and microsatellites were qualitatively different. In addition, for both classes of markers analyses of genetic differentiation yielded different results, depending on whether molecular distances between alleles or haplotypes were included.

**General information**

State: Published
Organisations: Section for Population Ecology and Genetics, National Institute of Aquatic Resources, Section for Freshwater Fisheries Ecology
Authors: Hansen, M. M. (Intern), Mensberg, K. D. (Intern), Berg, S. (Intern)
Pages: 239-252
Publication date: 1999
Main Research Area: Technical/natural sciences

**Publication information**

Journal: Molecular Ecology
Volume: 8
Issue number: 2
ISSN (Print): 0962-1083
Ratings:
BFI (2018): BFI-level 2
The fish population of the re-established Lake Oldenor: Natural invasion, management and effects on the ecosystem

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Mæhl, P. (Ekstern), Jacobsen, L. (Intern)
Publication date: 1999
Event: Abstract from Lake '99 - Sustainable Lake Management, 8th International Conference on the Conservation and Management of Lakes, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279392
Publication: Research › Conference abstract for conference – Annual report year: 1999

The fish population of the re-established Lake Oldenor: Natural invasion, management and effects on the ecosystem

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Mæhl, P. (Ekstern), Jacobsen, L. (Intern)
Publication date: 1999
Event: Poster session presented at International Conference on the Conservation and Management of Lakes, Copenhagen, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279402
Publication: Research › Poster – Annual report year: 1999

Tilskud til udsætning af krebs fra fiskeplejen - regler og udsætninger 1994-98

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 162-163
Publication date: 1999
Main Research Area: Technical/natural sciences
Publication information
Journal: Ferskvandsfiskeribladet
Volume: 97
Issue number: 7
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 224927
Publication: Communication › Journal article – Annual report year: 1999

Utilization of natural and artificial habitats by YOY pike in a biomanipulated lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Skov, C. (Intern), Berg, S. (Intern)
Pages: 115-122
Publication date: 1999
Main Research Area: Technical/natural sciences
Andre arter

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Monitoring
Authors: Berg, S. (Intern), Stoltze, M. (ed.) (Ekstern), Pihl, S. (ed.) (Intern)
Publication date: 1998

Publication information
Place of publication: København
Publisher: Miljø- og Energiministeriet, Danmarks Miljøundersøgelser og Skov- og Naturstyrelsen
Original language: Danish
Diel variation in habitat use by planktivores in field enclosure experiments: The effect of submerged macrophytes and predation

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Pages: 1207-1219
Publication date: 1998
Main Research Area: Technical/natural sciences

Publication information
Journal: Journal of Fish Biology
Volume: 53
Issue number: 6
ISSN (Print): 0022-1112
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.57 SJR 0.741 SNIP 0.882
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): SJR 0.951 SNIP 0.935 CiteScore 1.64
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): SJR 0.944 SNIP 0.934 CiteScore 1.76
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): SJR 1.049 SNIP 1.118 CiteScore 1.98
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): SJR 0.93 SNIP 1.035 CiteScore 1.88
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): SJR 0.895 SNIP 0.946 CiteScore 1.66
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.774 SNIP 0.834
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.773 SNIP 0.891
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.883 SNIP 0.968
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 0.996 SNIP 1.06
**Fiskeøgelsesundersøgelser i søer: Metoder til anvendelse i søer i vandmiljøplanens overvågningsprogram**

**General information**
State: Published  
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources  
Authors: Lauridsen, T. (Ekstern), Berg, S. (Intern), Michelsen, K. (Ekstern), Rugaard, T. (Ekstern), Schriver, P. (Ekstern), Jensen, J. (Ekstern), Rasmussen, A. (Ekstern)  
Number of pages: 39  
Publication date: 1998

**Publication information**
Place of publication: Silkeborg  
Publisher: Danmarks Miljøundersøgelser  
Original language: Danish  
Series: Teknisk anvisning fra DMU

**Gedder grantræer og gemmemesteder**

**General information**
State: Published  
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources  
Authors: Skov, C. (Intern), Berg, S. (Intern)  
Pages: 259-263  
Publication date: 1998

**Publication information**
Journal: Ferskvandsfiskeribladet  
Volume: 96  
ISSN (Print): 0015-0223  
Ratings:  
ISI indexed (2013): ISI indexed no  
ISI indexed (2012): ISI indexed no  
ISI indexed (2011): ISI indexed no  
Original language: Danish  
Source: orbit  
Source-ID: 227430

**Genetablering af søen Oldenor på Als**

**General information**
State: Published  
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources  
Authors: Berg, S. (Intern), Mæhl, P. (Ekstern)  
Pages: 81-89  
Publication date: 1998

**Publication information**
Journal: Ferskvandsfiskeribladet  
Volume: 96
Genetiske og økologiske anbefalinger for fiskeudsætninger i Danmark

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources, Section for Population Ecology and Genetics
Authors: Berg, S. (Intern), Hansen, M. M. (Intern)
Number of pages: 8
Publication date: 1998

Publication information
Place of publication: Silkeborg
Publisher: Ministeriet for Fødevarer, Landbrug og Fiskeri, Danmarks Fiskeriundersøgelser
Original language: Danish
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224914
Publication: Research › Journal article – Annual report year: 1998

Lyngsø

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Søndergaard, M. (Ekstern), Berg, S. (Intern), Jeppesen, E. (Ekstern)
Pages: 187-192
Publication date: 1998
Main Research Area: Technical/natural sciences

Publication information
Journal: Miljoenyt
Volume: 28
ISSN (Print): 0905-5991
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish

Bibliographical note
Søndergaard, M., E. Jeppesen, J.P. Jensen (eds.) Sørestaurering i Danmark, del 2: eksempler på sørestaurering i Danmark
Source: orbit
Source-ID: 227622
Publication: Research › Journal article – Annual report year: 1998

Oldenor

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Mæhl, P. (Ekstern)
Pages: 207-215
Publication date: 1998
Main Research Area: Technical/natural sciences
Rovfisk - en vigtig del af den rene sø

Sørestaurering i Danmark, del 1: Tværgående analyse og konklusioner

Udsætning af gedder i Danmark - anvendelse og effekter
Biolologisk samfund og samspil i lavvandede søer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jeppesen, E. (Ekstern), Søndergaard, M. (Ekstern), Jensen, J. (Ekstern), Lauridsen, T. (Ekstern), Jacobsen, L. (Intern), Berg, S. (Intern)
Pages: 223-228
Publication date: 1997
Main Research Area: Technical/natural sciences

Diet of rainbow trout (Oncorhynchus mykiss), stocked as a biomanipulation tool in a eutrophic brackish lake

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 88-98
Publication date: 1997

Host publication information
Title of host publication: Stocking and Introduction of Fish
Place of publication: Oxford
Publisher: Fishing News Books
Editor: Cowx, I.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 224894
Publication: Research - peer-review › Book chapter – Annual report year: 1997

Interactions between piscivores, zooplanktivores and zooplankton in submerged macrophytes: Preliminary observations from enclosure and pond experiments

The effects of piscivores upon zooplanktivore behaviour and distribution and the impact of zooplanktivores on the abundance and distribution of zooplankton are well documented. However, the potential indirect effect of piscivores reducing the predation pressure upon grazing zooplankton through behavioural changes of zooplanktivores has received little attention, even though this may be an important mechanism in enhancing the stability of submerged macrophytes in shallow lakes. Preliminary observations from an unreplicated large-scale field enclosure experiment and a replicated pond
experiment suggest that this mechanism is plausible with the set of piscivores (pike Esox lucius and perch Perca fluviatilis) and the zooplanktivores (0+ roach Rutilus rutilus and perch) common in temperate Europe. The presence of piscivores typically changed the habitat use and the activity level of zooplanktivores and the presence of zooplanktivores typically changed the habitat selection of cladoceran zooplankton. In the case of piscivore/zooplanktivore interactions, the risk of predation was enough to generate clear responses even where the losses to predation were low. However, only in the enclosure experiment was an indirect impact of the presence of piscivores, enabling Daphnia spp. to utilise open water in the presence of a high density of zooplanktivorous fish observed. Whether the magnitude and direction of the effect of piscivores is sufficient to benefit zooplankton may depend on the functional group (capable of foraging within structured habitats) of the predator (both piscivore and zooplanktivore), absolute and relative densities of predator and prey and predator dietary choice.

**General information**

State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Perrow, M. (Ekstern), Landkildehus, F. (Ekstern), Hjorne, M. (Ekstern), Lauridsen, T. (Ekstern), Berg, S. (Intern)
Pages: 197-205
Publication date: 1997
Main Research Area: Technical/natural sciences

**Publication information**

Journal: Hydrobiologia
Volume: 342
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.22
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.02
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.13
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 1.98
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 1
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 1
Web of Science (2008): Indexed yes
Web of Science (2007): Indexed yes
Web of Science (2003): Indexed yes
Web of Science (2002): Indexed yes
Pike (Esox lucius L.) stocking as a biomanipulation tool. 1. Effects on the fish population in Lake Lyng, Denmark

From 1990-1993 juvenile pike (Esox lucius) were stocked each spring in the eutrophic Lake Lyng (9.9 ha, max. depth 7.6 m, mean depth 2.4 m) in densities between 515 and 3616 pike ha\(^{-1}\). In 1989-90 the fish population consisted mainly of roach (Rutilus rutilus), rudd (Scardinius erythrophthalmus), perch (Perca fluviatilis) and ruffe (Gymnocephalus cernuus), and total fish biomass was estimated at 477 kg ha\(^{-1}\). Prior to stocking pike was not present in the lake. Following the first year of stocking, the density of roach, rudd and ruffe fry expressed as catch per unit effort decreased significantly by 64 to 97%. In 1991 ruffe disappeared completely. The pike stocking did not affect the density of perch significantly. The growth of pike was high and also the growth of perch increased significantly from 1990 to 1991 (p <0.001) and from 1991 to 1994 (p <0.001). We found a linear negative relationship between stocking density of pike in May or June and the abundance of juvenile planktivorous fish (r\(^2\) = 0.85, p <0.05) in the littoral zone in August. No relationship was found in the pelagic zone (r\(^2\) = 0.21, p > 0.4). Pike survival was low in late August/early September. We suggest that growth of the piscivorous perch increased due to increased Secchi depth and a continuous high density of 0+ planktivores in the pelagic zone of the lake during the years of pike stocking, possibly caused by behavioural changes and the forcing of the 0+ planktivores into the pelagic zone.

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jeppesen, E. (Ekstern), Søndergaard, M. (Ekstern)
Pages: 311-318
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 342
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.22
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.02
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.13
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 1.98
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
Pike (Esox lucius L.) stocking as a biomanipulation tool 2. Effects on the lower trophic levels in lake Lyng, Denmark

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Søndergaard, M. (Ekstern), Jeppesen, E. (Ekstern), Berg, S. (Intern)
Pages: 319-325
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: Hydrobiologia
Volume: 342/343
ISSN (Print): 0018-8158
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.27
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.16
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.22
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.02
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.13
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 1.98
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Web of Science (2010): Indexed yes
Rovfisks betydning for miljøet i søer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern)
Pages: 116-120
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: Ferskvandsfiskeribladet
Volume: 95
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
ISI indexed (2011): ISI indexed no
Original language: Danish
Source: orbit
Source-ID: 227623
Publication: Research - peer-review › Journal article – Annual report year: 1997

Rovfisks betydning for miljøet i søer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Jacobsen, L. (Intern)
Pages: 8-10
Publication date: 1997
Main Research Area: Technical/natural sciences

Publication information
Journal: Flodkrebsen
Volume: 4
Original language: Danish
Source: orbit
Source-ID: 224923
Publication: Research › Journal article – Annual report year: 1997

Udsætning af gedder - anvendelse og effekter

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 8-11
Publication date: 1997
Main Research Area: Technical/natural sciences
Udsætning af gedder i Danmark

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern)
Pages: 236-240
Publication date: 1997
Main Research Area: Technical/natural sciences

Diurnal variation in habitat use of juvenile perch (Perca fluviatilis), and roach (Rutilus rutilus) and the effect of predation risk

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Publication date: 1996
Event: Poster session presented at International workshop: The role of submerged macrophytes in structuring the biological community and bio-geochemical dynamics in lakes, Silkeborg, Denmark.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279403
Publication: Research › Poster – Annual report year: 1996

Sørestauring ved udsætning af geddeyngel af fiskeriet i Isefjorden og Tempelkrogen

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Søndergaard, M. (Ekstern), Berg, S. (Intern), Jeppesen, E. (Ekstern)
Pages: 74-77
Publication date: 1996
Main Research Area: Technical/natural sciences

Publication information
Journal: Vand & Jord
Volume: 2
ISSN (Print): 0908-7761
Ratings:
ISI indexed (2013): ISI indexed no
ISI indexed (2012): ISI indexed no
Udsætning af helt, Coregonus lavaretus L., i Ring Sø ved Brædstrup

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Plesner, T. (Ekstern), Berg, S. (Intern)
Number of pages: 59
Publication date: 1996

Publication information
Place of publication: Silkeborg
Publisher: Danmarks Fiskeriundersøgelser
Original language: Danish
Series: DFU-rapport
Number: 20-96
Main Research Area: Technical/natural sciences
Electronic versions:
20_96_uds_tning_af_helt_i_ring_s_ved_br_dstrup.pdf
Source: orbit
Source-ID: 227139
Publication: Research › Report – Annual report year: 1996

Improvement of water quality in shallow coastal waters by manipulations of fish communities

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Søndergaard, M. (Ekstern), Mortensen, E. (Ekstern), Berg, S. (Intern), Geertz-Hansen, P. (Intern)
Number of pages: 68
Publication date: 1995

Publication information
Publisher: Norspa Research Programme
Original language: English
Main Research Area: Technical/natural sciences

Bibliographical note
Final report
Source: orbit
Source-ID: 227620
Publication: Research › Report – Annual report year: 1995

Predation risk and habitat choice in juvenile perch (Perca fluviatilis L.) and roach (Rutilus rutilus L.)

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Perrow, M. (Ekstern), Landkildehus, F. (Ekstern), Hjørne, M. (Ekstern), Lauridsen, T. (Ekstern), Berg, S. (Intern)
Publication date: 1995
Event: Abstract from Shallow Lakes 95 Conference: Trophic cascades in shallow freshwater and brakish lakes. University of Warsaw, Mikolajki, Poland.
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 279395
Publication: Research › Conference abstract for conference – Annual report year: 1995

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Berg, S. (Intern), Koed, A. (Intern)
Number of pages: 24
Publication date: 1994

Publication information
Place of publication: København
Publisher: Telestyrelsen
Original language: Danish
Main Research Area: Technical/natural sciences
Source: orbit
Source-ID: 278324
Publication: Research › Report – Annual report year: 1994

Mod klarvandede søer - alternative stabile tilstande i lavvandede ferskvandssøer

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jeppesen, E. (Ekstern), Søndergaard, M. (Ekstern), Lauridsen, T. (Ekstern), Berg, S. (Intern), Jacobsen, L. (Intern), Christoffersen, K. (Ekstern)
Pages: 8-11
Publication date: 1994
Main Research Area: Technical/natural sciences

Publication information
Journal: Miljøforskning
Issue number: 12
Original language: Danish
Links:
http://info.au.dk/smp/smp_dk/Publikationer/Files/Nyhedsbreve/nybrev12.pdf
Source: orbit
Source-ID: 282506
Publication: Research › Journal article – Annual report year: 1994

Samspil mellem vegetation og fisk i en lavvandet sø

General information
State: Published
Organisations: Section for Freshwater Fisheries Ecology, National Institute of Aquatic Resources
Authors: Jacobsen, L. (Intern), Berg, S. (Intern)
Pages: 35-39
Publication date: 1994
Main Research Area: Technical/natural sciences

Publication information
Journal: Miljøforskning
Issue number: 12
Original language: Danish
Links:
http://info.au.dk/smp/smp_dk/Publikationer/Files/Nyhedsbreve/nybrev12.pdf
Source: orbit
Source-ID: 282505
Publication: Research › Journal article – Annual report year: 1994

Projects:
Behaviour and feeding biology of lacustrine fish species in relation to lake type

National Institute of Aquatic Resources
Period: 01/03/2013 → 30/01/2018
Number of participants: 6
Phd Student:
Holst Hansen, Joan (Intern)
Supervisor:
Brodersen, Jakob (Ekstern)
Main Supervisor:
Skov, Christian (Intern)
Examiner:
Berg, Søren (Intern)
Olin, Mikko Johannes (Ekstern)
Rosten, Carolyn (Ekstern)

Financing sources
Source: Internal funding (public)
Name of research programme: 1/3 FUU, 1/3 inst 1/3 Andet
Project: PhD

Handbook for management of lake fish and fisheries (38826 & 39169)
This project has developed a web based handbook in lake fisheries management. The end goal was to provide local anglers and lake managers (which are often not biologists) with knowledge about the biology of focal species as well as a tool box on how to manage these with regards to both environment and fisheries. A central part of the handbook focus on compiling thorough descriptions of species and their ecology, environmental requirements etc. based on existing knowledge from our own research and the literature. Focus is also on a description of different measures that can be used to protect or enhance abundance of specific fish species. The handbook incorporates existing legislation on freshwater fisheries and management as well as a description of angling techniques. In addition we give advice on how anglers specifically and citizens in general can participate in the process, i.e. by practical help or cooperation with the municipalities or other authorities that may be responsible for the lake management.

The handbook covers all types of lake fishery preferences (species, sizes, quantity, etc.), with due consideration to authenticity and environmental conditions. All pages include FAQ’s to answer the most common inquiries, as well as email addresses of the authors of the text which facilitates that users of the handbook easily can interact with the researchers. The lake handbook was published on line in 2013 as an integrated part of the existing homepage www.fiskepleje.dk. It is continuously updated when new knowledge is available, always providing latest knowledge on fisheries management to a broad audience of users.

Lake ecology and fish population dynamics is complex and often very lake specific. Unfortunately knowledge on the environment and fish populations of specific lakes is often scarce or lacking, making fisheries management difficult. A part of the project has focused on how to use citizen science to increase our knowledge. Hence, we explore the use of anglers log book as a method to get knowledge on fish populations and we initiated a nation-wide anglers log book for pc and cellphones (which in 2013 became an independent project expanding from lakes to cover all freshwater and marine habitats). The project also explores the use of citizens reporting on environmental parameters in lakes. We have by now recruited a corpse of citizens (‘Water Environment Agents’) who measure Secchi depths and presence of the invasive zebra mussel in various lakes on a regular basis. We continue recruitment of citizens for this purpose.

Another part of the project has been aimed at establishing a web-based platform, named The Knowledge Base, where citizens and authorities can find knowledge about specific lakes. The cornerstone is a web-library, where close to 1000 reports on lake environment or fish covering the last ca. 75 years can be found in pdf-format. Some reports has never been published before, others has been very hard to find (only paper-versions in The National Library). A large collection (1000+) of historic (1915-1960) photos of Danish lakes and rivers taken by former employees of the department (C. V. Otterstrøm and Knud Larsen) has been digitalized and will be available online in fall 2016. The primary search method is via a GIS-based map. This will be supplemented with a more traditional database search option fall 2016.

The project is coordinated by DTU Aqua.

The project is funded by the Danish Rod and Net Fishing License Funds.

National Institute of Aquatic Resources
Section for Freshwater Fisheries Ecology
The population of whitefish (Coregonus lavaretus) in Ringkøbing Fjord: Effects of fishery, stocking and natural reproduction (38827)

Objectives of the project are to improve our knowledge on the whitefish population in the Ringkøbing Fjord Lagoon and effects associated with the commercial exploitation of the population, i.e. to what extent the traditional gill-net (46 mm monofil nets) fishery for whitefish affect both the whitefish population and other species of fish in the lagoon. Another goal is to establish how much natural reproduction and stocking of hatchery reared fry contributes to the adult population. These results will provide a much better basis for the management of whitefish populations in Denmark in general and in Western Jutland in particular.

The natural population of whitefish in the Ringkøbing Fjord Lagoon has been the subject of an extensive fishery for more than 100 years. The fishery is primarily performed by commercial fishermen, but estimated from the number of recreational fishers in the area, a substantial amount is caught by this group as well. The lagoon holds the largest population of whitefish in Denmark. The official landing statistics (only covering the commercial catches) shows that the catch through the 20th century typically has varied between 10 and 60 tons per year (e.g. mean 1980-2000 25.1 tons per year). Since 2001 the landings have increased to a mean of 55 tons per year (range 14-94 t), with a mean value of 1.2 m DKK. This constitutes 75-95 % of the total Danish whitefish fishery.

Since 1986 ca. 4 million hatchery reared fry has been stocked in the lagoon each year. 3.6 million are stocked as newly hatched larvae in April. 0.4 million are raised to a size of 3-4 cm before stocking in late May.

The population of sea trout (Salmo trutta) in the main tributary of the lagoon, the River Skjern, is much smaller than expected, considering the environmental conditions of both the river and the lagoon and the size of the river. One possible reason is by-catch in the whitefish fishery. The landing of sea trout and the endangered salmon (Salmo salar) from the lagoon is prohibited and the discard mortality for sea trout is considered to be very high. Investigations on the subject of by-catch in gill-nets set for whitefish in the Baltic Sea supports this hypothesis.

In the project we estimate the catch of whitefish and the by-catch of other fish species in the whitefish gill-net fishery, with special emphasis on salmonids, by a combination of experimental fishing, monitoring selected commercial fishing trips and a questionnaire on the fishermen. A number of different approaches concerning time and place of fishing and net construction is tested to describe how much by-catch can be minimized.

The result of natural spawning in River Skjern is investigated by a combination of catching newly hatched larvae with drift-nets and e-DNA analysis of water samples from the river. The latter method is a very novel approach. Through the experimental fishing, supplemental data on the whitefish, salmonids as well as other species (less detailed) are collected to describe population dynamic parameters (size and age distribution, growth, condition etc.), primarily of whitefish and salmonids.

The results show that by-catch of sea trout in the whitefish gill-net fishery is unavoidable, but also that the by-catch can be reduced substantially by employing specific gears and methods. The by-catch of salmon is insignificant while the by-catch of other species, especially flounder is substantial. These results will be reported in autumn 2016. The investigation on natural reproduction in the River Skjern is still ongoing and will be reported in 2017.

This project is coordinated by DTU Aqua.
The project is funded by the Danish Rod and Net Fishing License Funds.
Migration and spawning behaviors of brackish water perch and pike (38413)

Brackish water populations of pike and perch have decreased severely along the coasts of the Baltic Sea. In Denmark a drastic decline in catches of brackish water pikes has been recorded during the last 30-40 years. Both brackish water pikes and perch are well estimated in angling and commercial fisheries on the brackish coastlines around the southern part of Zealand and the southern islands. Very little is known about their behaviour and life history, for instance the possible dependence of access to freshwaters to spawn. Obstacles in rivers and hereby blocking of migratory routes can therefore be crucial to reproductive success and survival of brackish fish populations along with deterioration of spawning areas in freshwater. In some areas perch is known to migrate into rivers to spawn in freshwater, but perch are also observed to spawn in brackish waters. In the Gulf of Bothnia perch have different spawning and migration strategies and some perch spawn in the bays with salinities of 6 ppt. whereas the upper limit of salinity tolerance during spawning is not known in Danish areas, where salinity is often 8-10 ppt.

The present project aims to initiate investigations of the dependence of perch for access to freshwater lakes and bogs for spawning. In particular it will be explored if it is possible to enhance brackish water perch recruitment by creating or reopening of access to lakes and bogs along a river system and this way to be able to re-establish or increase the brackish water perch fishery. This is highly relevant to local authorities that manage restoration of rivers and lakes. For this purpose the perch population of a large number of lakes and bogs along river systems with present or historical migration of brackish water perch will be monitored. Some of the lakes have connection to the river, some not, and in the latter a connection will be created afterwards. The fish population and recruitment of perch will be studied before and after the intervention. Scale chemistry will be explored and possibly this will be able to define whether large perch caught in the lakes and bogs during spawning actually had a brackish water life history. The project also aims to elucidate the salinity tolerance of perch under Danish condition to establish whether it is possible that some perch spawn along the coast and bays of southern Denmark. The project is done in close cooperation with municipalities around southern Zealand.

The project is coordinated by DTU Aqua.

National Institute of Aquatic Resources
Section for Freshwater Fisheries Ecology
Aalborg University
Municipality of Næstved
Municipality of Vordingborg
Municipality of Guldborgsund
University of Copenhagen
Period: 01/01/2010 → 31/12/2016
Number of participants: 4
Research area: Freshwater Fisheries and Ecology
Project participant:
Berg, Søren (Intern)
Skov, Christian (Intern)
Aarestrup, Kim (Intern)
Project Manager, academic:
Jacobsen, Lene (Intern)
Behavior of lake-dwelling fish: natural and fishery induced impacts (38270)
The project focuses on establishing new and comprehensive knowledge on behavior of lake dwelling fish and the impact of human activities, which can eventually enhance management of freshwater fish populations. The study is based on an acoustic telemetry system, which facilitates fine scale 3D positioning of fish several times a minute with sub meter accuracy. The system has been deployed in a small lake for five consecutive years and has generated data sets on pike, perch and roach behavior with unprecedented details, e.g. activity levels and habitat choice on a diel and seasonal basis coupled to environmental factors such as establishment and break of thermoclines. For instance, studies on pike winter behavior during ice cover have generated new insights and added to the increased consciousness of the importance of year-round knowledge on lake ecology processes. The remote sensed monitoring of the tagged fish without presence of personnel has allowed for comparison of fish behavior in situations with and without human disturbances, e.g. fishery-related activities. This way a distinct and instantaneous impact of boating on fish behavior has been revealed and the impact of catch and release angling has been addressed. Finally, the system has facilitated studies extending laboratory findings to behavior in the field. For instance, findings of physiological (metabolic rates) and behavioral properties of individual fish in the lab have been linked with behavior of the same individuals in nature by subsequent tagging and release in the lake.

Several issues have been studied concurrently the last years and will be continued: A principal focus area has been striving to establish which factors impact and confine natural pike populations. The majority of larger pike in the study lake have been followed for more than three years, which has provided a detailed picture of pike behavior and individual variation. The interactions between pike size groups and whether the behavior of smaller pike is controlled by larger individuals has been studied and has revealed differences in both activity patterns and habitat choice ruled by the largest pike, as well as uncovered extensive cannibalism among large individuals. Pike exploitation of various spawning habitats has been assessed and a genetic analysis of pike individuals and pike eggs will be explored, possibly facilitating assessment of the individual contribution to the population and thus enabling a cross-discipline approach to explore how behavior and reproductive fitness is related.

The studies on winter biology are not only covering pike, but are incorporating the entire fish community adding further insights to the limited overall knowledge on winter lake ecology. Further, while simultaneous tracking several species the system allows for studies of predator-prey and species interactions, shoaling etc. in a natural system.

The project was coordinated by DTU Aqua.
National Institute of Aquatic Resources
Section for Freshwater Fisheries Ecology
Fisheries and Oceans Canada
Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), Berlin
The distribution of Danish freshwater fishes (38269)
The objectives of this project are, for the first time in almost 100 years, to produce and in a book present an updated distribution map of all freshwater fishes found in Danish fresh waters. The results will act as a reference point when analyzing both previous and future changes in the distribution of freshwater fishes in Denmark, e.g. related to climatic changes.

Until the beginning of this project the geographic distribution of freshwater fishes in Denmark was not known in detail. For many species we only knew in which part of the country and maybe in which river system they live now or had lived earlier. Thus, our knowledge was incomplete and in general fragmented and consequently hard to find. In addition much of the existing information was old and newly arrived alien species had not been registered correctly. Thus, there was a need for a complete and updated status on the distribution of freshwater fish. Such a status will be a milestone in Danish inland fisheries research and management. Its value in relation to research and management as well as providing public access to correct information will be high. As an example the database has been used to revise the red data list for freshwater fishes in Denmark.

In this project we have 1) collected existing data on the occurrence of freshwater fish from public and private institutions and 2) gathered information from the public on catches and other observations of freshwater fish. As supplement we have 3) made targeted surveys to fill gaps and improve knowledge on rare species. All this information have been 4) combined in a GIS-based database. Finally we have 5) presented the complete set of information on geographical distribution of freshwater fishes in Denmark in a book also containing detailed information on the biology and ecology of all species (native and alien) present in Denmark.

The book was published in 2012 and contains 700 pages. It is written in Danish and illustrated with a large number of high quality photos of all species. It is written by 5 main authors (two of which are from DTU Aqua) and a few guests (one from DTU Aqua). Even though written to a broad audience, it is fully documented with references in the text. Due to private funding it has been possible to distribute the book at a very low price, 399 DKK (ca. 53 €). The revenue from the sale is reserved for a future revision and re-publishing of the book.

The project was coordinated by Natural History Museum of Denmark, University of Copenhagen, Denmark.

The project was funded by Aage V. Jensen’s Charity Foundation.

The project is funded by the Danish Rod and Net Fishing License Funds.

National Institute of Aquatic Resources
Section for Freshwater Fisheries Ecology
University of Copenhagen
Period: 01/01/2006 → 30/12/2012
Number of participants: 2
Research area: Freshwater Fisheries and Ecology
Project Manager, academic:
Rasmussen, Gorm (Intern)
Berg, Søren (Intern)

Predator fish populations: The impact of behavioural and physical-biological parameters (38267)
Some of the mechanisms guiding the interactions of fish species in clear water lakes seems to act differently in turbid water, thus more knowledge of these relationships are essential. Both in order to understand how the fish population in a lake will develop when the lake is about to change to a clear water state, but also in order to understand the stability of predator fish populations under various environmental conditions. One of the important related issues can be the capability of predator fish, to hunt in turbid water and the interactions of more predator fish species. The capacity of pike and large perch to hunt in turbid water was tested in extensive pond experiments with different clay turbidity, including also the importance of prey fish density. The experimental approach was supplemented by parallel radio telemetry field studies of both predator species, in order to explain the role of behaviour and the importance for the natural composition of fish populations in turbid and clear water lakes. Pond experiments showed that pike were perfectly able to hunt in turbid water,
backed up by the field findings of higher activity levels for some pike in the turbid lake, however in general with a larger variation in behavioural strategy in turbid water. Surprisingly, perch were also capable of hunting in very low turbidity at least in high prey fish densities. The telemetry study showed two alternative behavioural patterns of perch in clear water and turbid water, perch being more active in the turbid water on a diel basis including at night and not showing any sunrise and sunset peaks in activity as was seen in the clear water lake. The alternative strategy in the turbid lake might be interpreted as a means of allocating more time for hunting due to visual constraints. Contemporary studies on prey fish behaviour in the study lakes also revealed different behaviours on a diel basis dependent on turbidity, which can be linked to predator fish behaviour.

Two peer-reviewed papers and a master thesis were published on pike-behaviour as well as two peer-reviewed papers on perch behaviour. Results were presented on international and national conferences.

The project was coordinated by DTU Aqua.

The project was funded by the Danish Rod and Net Fishing License Funds.

National Institute of Aquatic Resources

Section for Freshwater Fisheries Ecology
Lund University
Period: 01/01/2005 → 30/06/2016
Number of participants: 5
Research area: Freshwater Fisheries and Ecology
Project participant:
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Berg, Søren (Intern)
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Baktoft, Henrik (Intern)
Project Manager, academic:
Jacobsen, Lene (Intern)
Project

Management of the fish population in lakes under heavy human influence (38268)
The objectives of this project are to improve our understanding of how the physical conditions of lakes can affect spawning and fry mortality and growth for the most important piscivorous fish species. We will especially focus on the conditions of the littoral zone. This knowledge can be used to ensure that the demands of these species in relation to spawning and YOY development are met. The results will be used as part of the web-based “Handbook on the Management of Lake Fish”, which is under development.

The majority of Danish lakes are strongly influenced by human activity, partly in the form of increased nutrient load, but also direct physical alterations are common, e.g. by regulation of the water level, consolidation of the banks or the consequences of heavy boat traffic. These types of physical alterations are often most common in lakes situated in or close to urban areas. In these kinds of lakes, lake restoration by biomanipulation might prove to be insufficient to achieve the improved environmental conditions expected, including a good population of piscivorous fish. Thus, the lakes environmental quality, as well as the possibility to use the lake for recreational activities including recreational fisheries, might be negatively influenced.

During the project, several activities related to this subject have been conducted:
1) An experiment demonstrating the importance of water depth for the mortality of 0+ pike.
2) Another experiment, which showed that it is possible to build an artificial spawning habitat for pike in an urban, artificial lake without a natural littoral zone and that the pike did use it for spawning and that the pike fry used it as nursery habitat.
3) A stocking experiment with 0+ pike to find out if stocking is a possible way to enhance a very low population density of pike in a lake with heavy boat traffic and extensive angling. During this experiment we demonstrated that it is possible to tag 0+ pike of 6-8 cm with PIT tags without mortality, but also that the tagging has a negative effect on growth of the tagged pike.
4) An investigation on the spawning habitat choice and spawning behavior of pike in a small natural lake (in cooperation with project no 39270).

The use of specially designed “egg traps” has been used successful in two of these experiments.

The project is coordinated by DTU Aqua.

National Institute of Aquatic Resources
The development of the fish community in lakes after biomanipulation: key factors in the development of a good population of piscivorous fish species (38264)

The objectives of the project are to strengthen the ability of DTU Aqua to consult authorities and stakeholders in the management of the fish community in lakes through (i) building time series on the development of the fish population in lakes, which has been subject to biomanipulation, (ii) make a cross analysis on a large data set containing information on standardized investigations of the fish community in more than 100 Danish lakes. Target species in lake fisheries in Denmark are the piscivorous species, which will be the focus of this project as well.

1) Biomanipulation has been applied to more than 50 Danish lakes with the objective to restore eutrophic lakes to a state with clear water, extensive distribution of submerged macrophytes, a higher degree of biodiversity compared to turbid lakes, and a fish community dominated by piscivorous fish species. It is possible to apply biomanipulation to almost any eutrophic lake, but this restoration tool will only have a long lasting effect in lakes with an intermediate or low content and load of nutrients. In lakes where the improved environmental conditions last for several years, changes in the fish community can still be observed many years after the biomanipulation. Thus we want to describe the long term (10-25 years) development of the fish community, to be able to correctly answer what the end product of a biomanipulation is, regarding fish, on both community structure and population dynamics of the piscivorous species.

Beginning in 1990 we have built time series of the development on the fish population in 10 Danish lakes, where biomanipulation has been applied as a restoration tool. We use a standardized investigation method, which allows both within and between lakes analysis. Under the project 38826 (Handbook for management of lake fish and fisheries) a status report will be prepared in fall 2011.

2) The cross analysis of the more than 100 lake data set aims at developing models to describe the relation between population density and size distribution for important piscivorous species and factors like food availability, distribution and types of vegetation, nutrient levels and water clarity. This analysis is also done within the frame of the project 38826 (Handbook for management of lake fish and fisheries).