

# Length, age and estimated back-calculated length of pike (*Esox lucius*) in relation to water temperature from Lake Mälaren and the Swedish Baltic Sea archipelago 1963-2019 - Estimated backcalculated body growth of pike (*Esox lucius*) from environmental monitoring and commercial catches.

**SND-ID:** 2021-280-1. **Version:** 1. **DOI:** <https://doi.org/10.5878/b9rd-6b38>

## Download data

Pike\_backcalculation.csv (1.17 MB)

Readme\_Backcalculation\_Pike.txt (1.13 KB)

## Download all files

2021-280-1-1.zip (~1.17 MB)

## Citation

Östman, Örjan, Berggren, T., Sundblad, G., & Bergström, U. (2022) Length, age and estimated back-calculated length of pike (*Esox lucius*) in relation to water temperature from Lake Mälaren and the Swedish Baltic Sea archipelago 1963-2019 - Estimated backcalculated body growth of pike (*Esox lucius*) from environmental monitoring and commercial catches (Version 1) [Data set]. Swedish University of Agricultural Sciences. Available at: <https://doi.org/10.5878/b9rd-6b38>

## Creator/Principal investigator(s)

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## Research principal

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## Principal's reference number

SLU.aqua.2021.IÄ-2

## Description

Data on estimated back-calculated body growth from both harvested and non-harvested populations of northern pike over 50 years along the Baltic Sea coast and in Lake Mälaren, Sweden. The aim is to study spatial and temporal variation in body growth, and especially how body growth relates to variation in water temperature. Data on surface water temperature from Kvädöfjärden (Baltic Sea) and Lake Mälaren during the study period. See detailed description of methods and analyses in the original article.

Length and age of pike from monitoring and commercial fisheries. Data include estimated length at

age of individuals from backcalculations of wingbones.

### **Data contains personal data**

No

### **Language**

[English](#)

### **Time period(s) investigated**

1963 – 2019

### **Biobank is connected to the study**

This study has used existing samples from a scientific collection or biobank

Scientific collection or biobank name: Vävnað för åldersanalys på fisk (Databas Oden, SLU Akvatiska resurser)

Type(s) of sample: Wingbones from pike (*Esox lucius*)

### **Variables**

31

### **Data format / data structure**

[Numeric](#)

[Text](#)

### **Data collection 1**

- Description of the mode of collection: Age determination and backcalculation of length at age from the wingbone of pikes collected from commercial fisheries during spawning.
- Time period(s) for data collection: 1963 – 2019
- Temporal resolution: 1 year

### **Geographic spread**

Geographic location: [Stockholm County](#), [Östergötland County](#)

Geographic description: Lake Mälaren and coastal area of Östergötland county

### **Responsible department/unit**

Aquatic resources

### **Funding**

- Funding agency: Swedish Agency for Marine and Water Management
- Funding information: Decision Dnr 4637-18

### **Research area**

[Ecology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Evolutionary biology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Biota](#) (INSPIRE topic categories)

## Keywords

[Climate change adaptation](#), [Fisheries management](#), [Fishing](#), [Water protection area](#), [Biodiversity protection](#), [Climate change impact](#)

## Publications

Berggren, T., Sundblad, G., Bergström, U., Östman, Ö. 2022. Warmer water increases early body growth of northern pike (*Esox lucius*), but mortality has larger impact on decreasing body sizes. Canadian Journal of Fisheries and Aquatic Science, 79(5):771-781.

**DOI:** <https://doi.org/10.1139/cjfas-2020-0386>

If you have published anything based on these data, [please notify us](#) with a reference to your publication(s). If you are responsible for the catalogue entry, you can update the metadata/data description in DORIS.

## Polygon (Lon/Lat)

16.011540695941, 59.553547497057

16.011540695941, 57.99645479967

18.513299047392, 57.99645479967

18.513299047392, 59.553547497057

16.011540695941, 59.553547497057

## Accessibility level

Access to data through SND  
Data are freely accessible

## Use of data

[Things to consider when using data shared through SND](#)

## Versions

Version 1. 2022-02-03

## Related research data in SND's catalogue

[Length, age and estimated back-calculated length of pike \(\*Esox lucius\*\) in relation to water temperature from Lake Mälaren and the Swedish Baltic Sea archipelago 1963-2019 - Time series of monthly average surface water temperature \(<0.5m\) during summer at Kvädöfjärden \(Baltic Sea\) and Lake Mälaren.](#)

## Download metadata

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