



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences



Mälaren

Utvecklingen under nästan 50 år

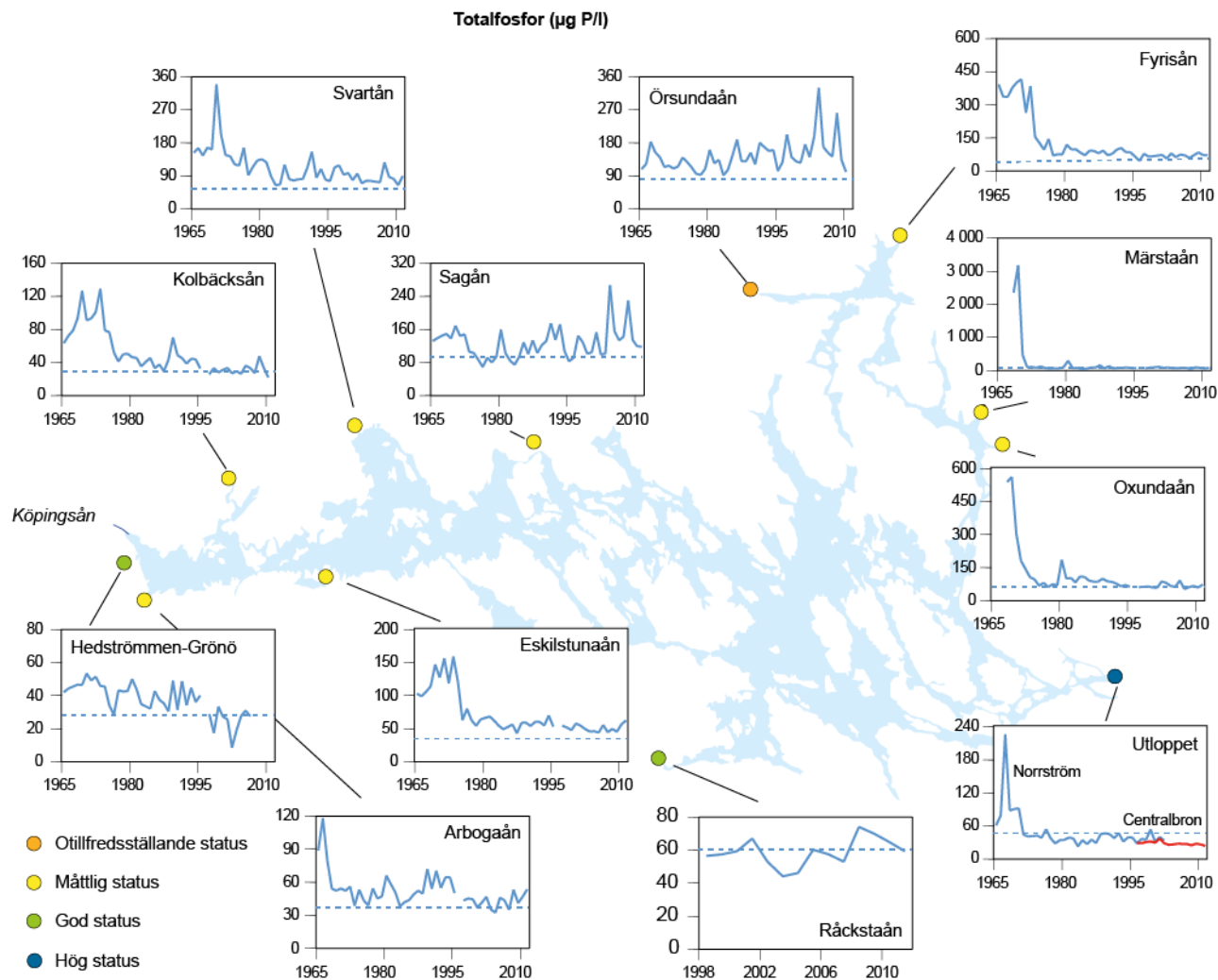
Lars Sonesten

Institutionen för vatten och miljö

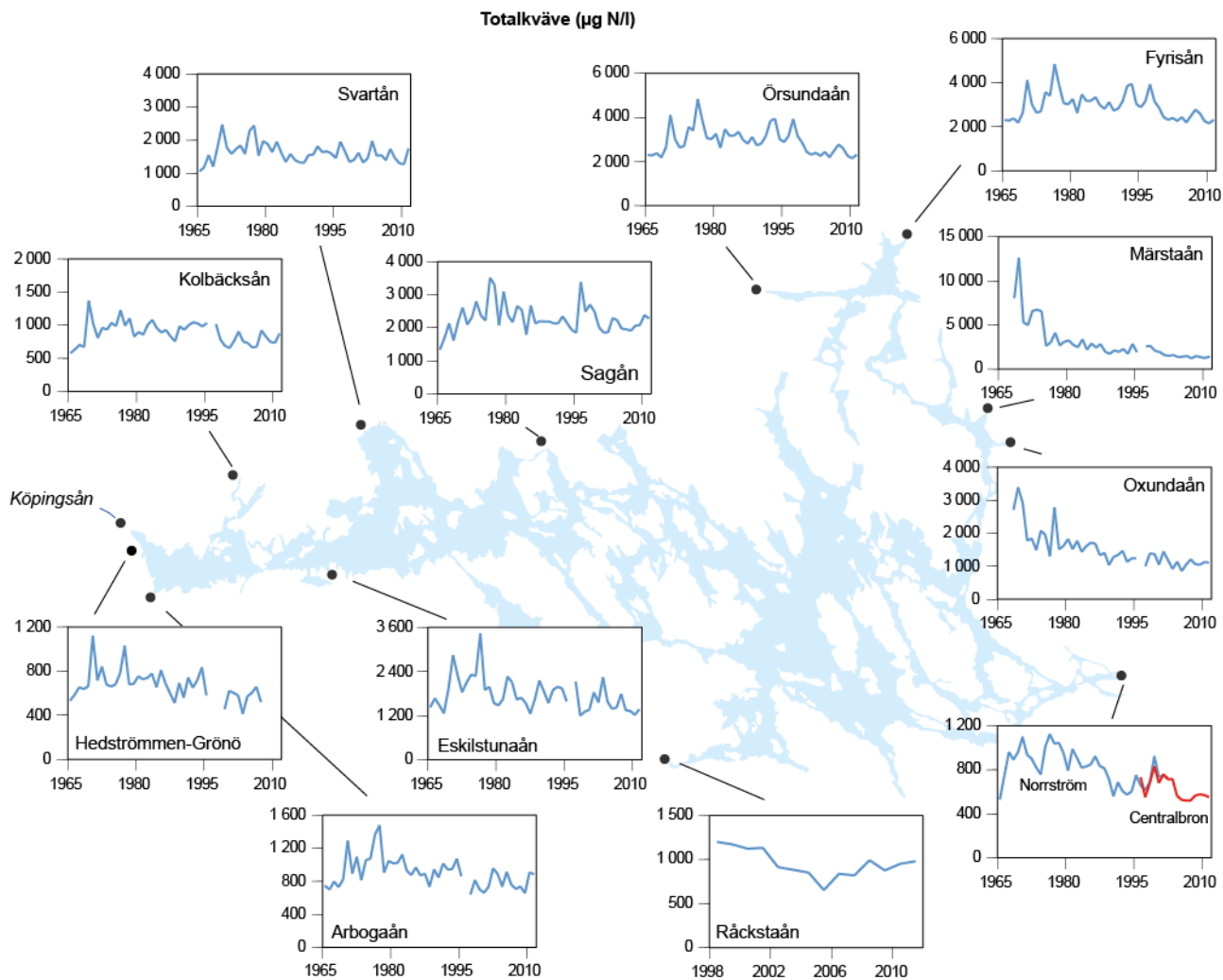


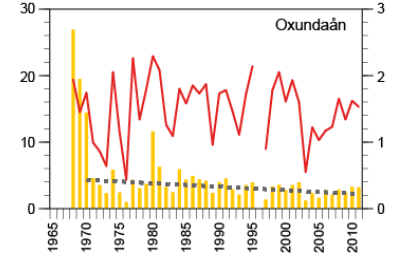
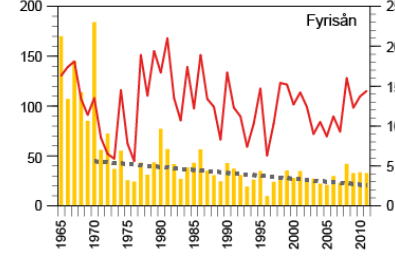
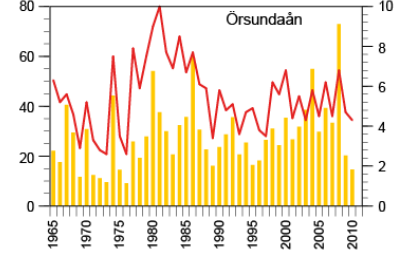
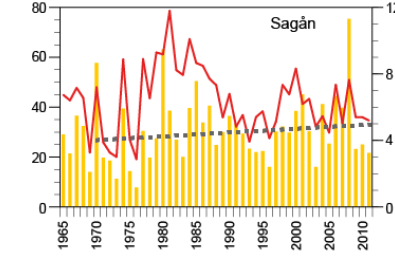
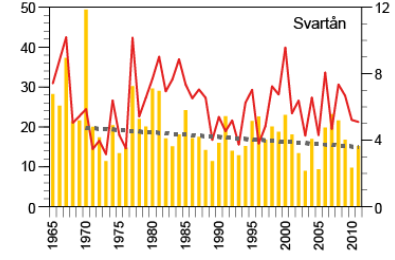
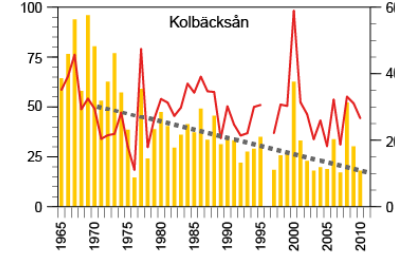
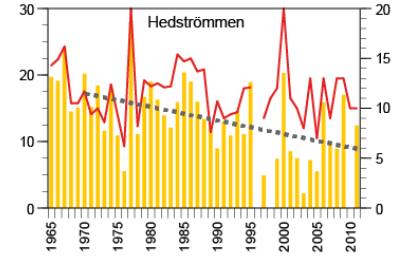
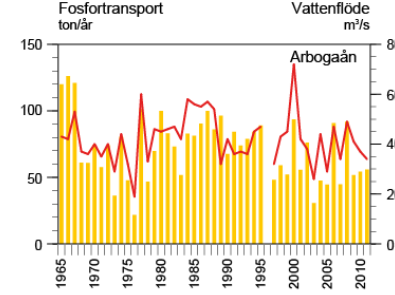
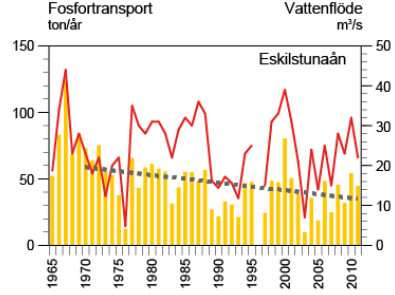
Mälarens tillflöden

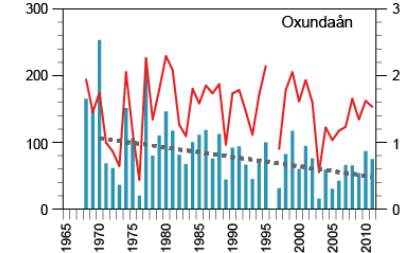
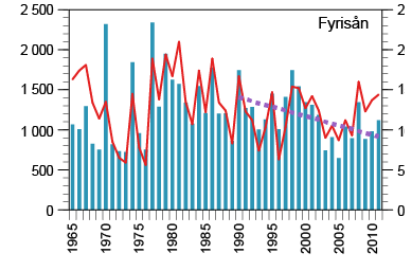
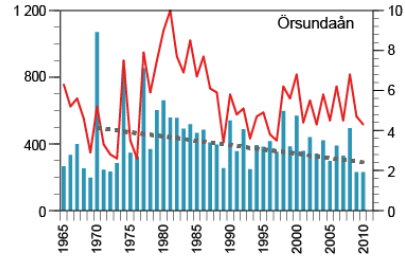
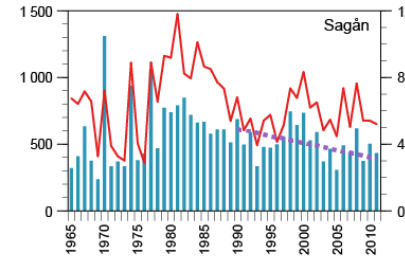
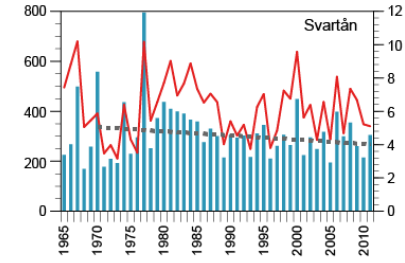
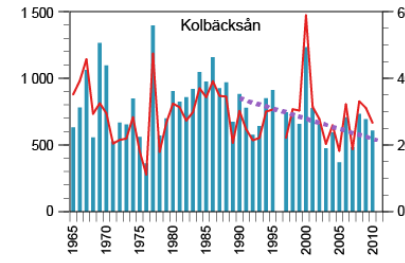
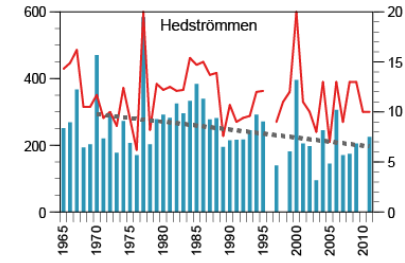
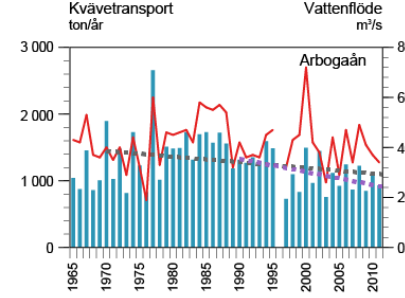
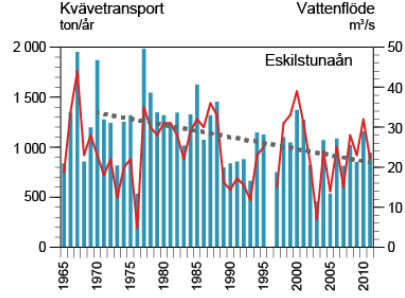
Totalfosfor i tillflödena



Totalkväve i tillflödena



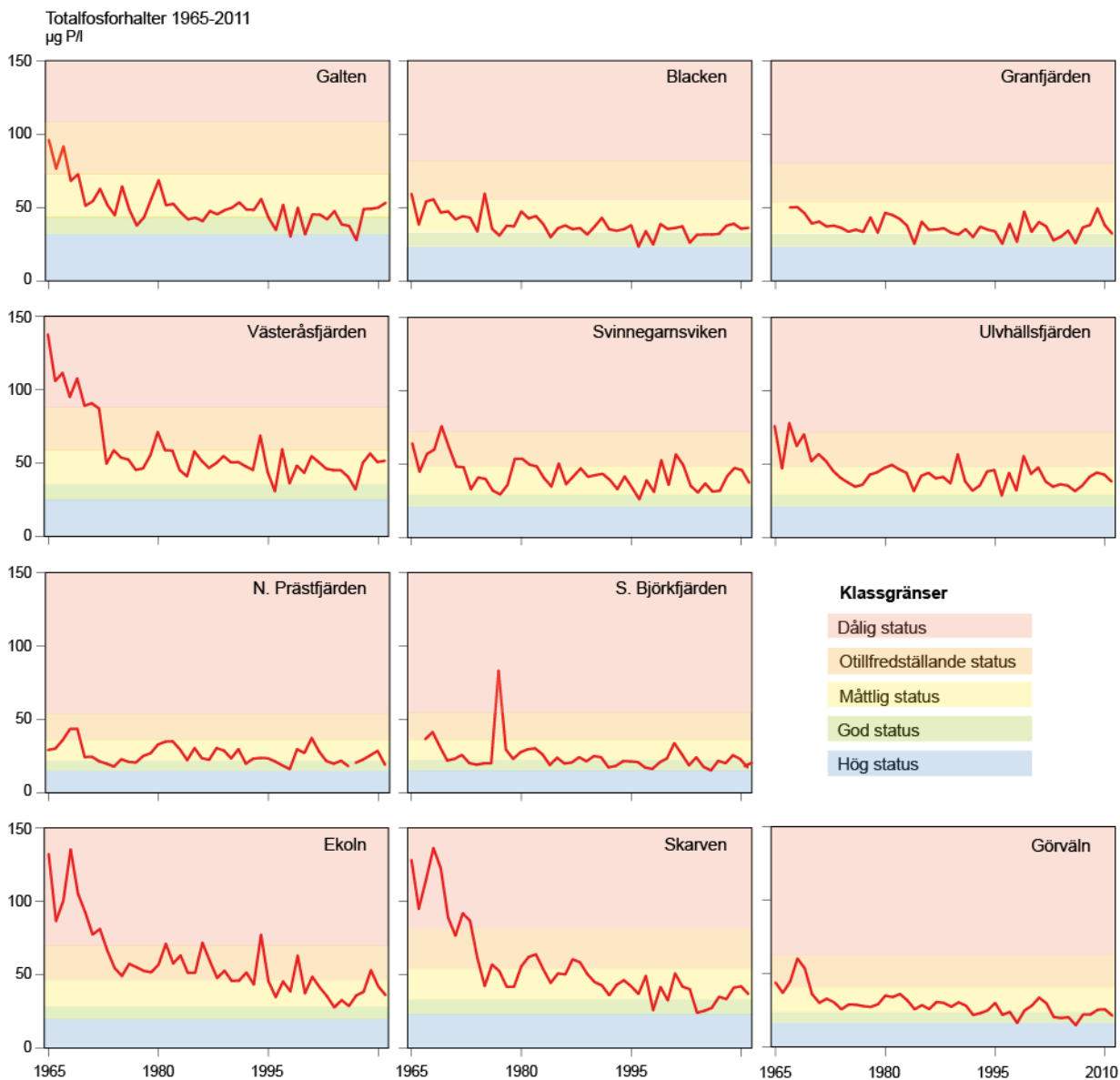






Vattenkemin i Mälaren

Totalfosfor i Mälaren

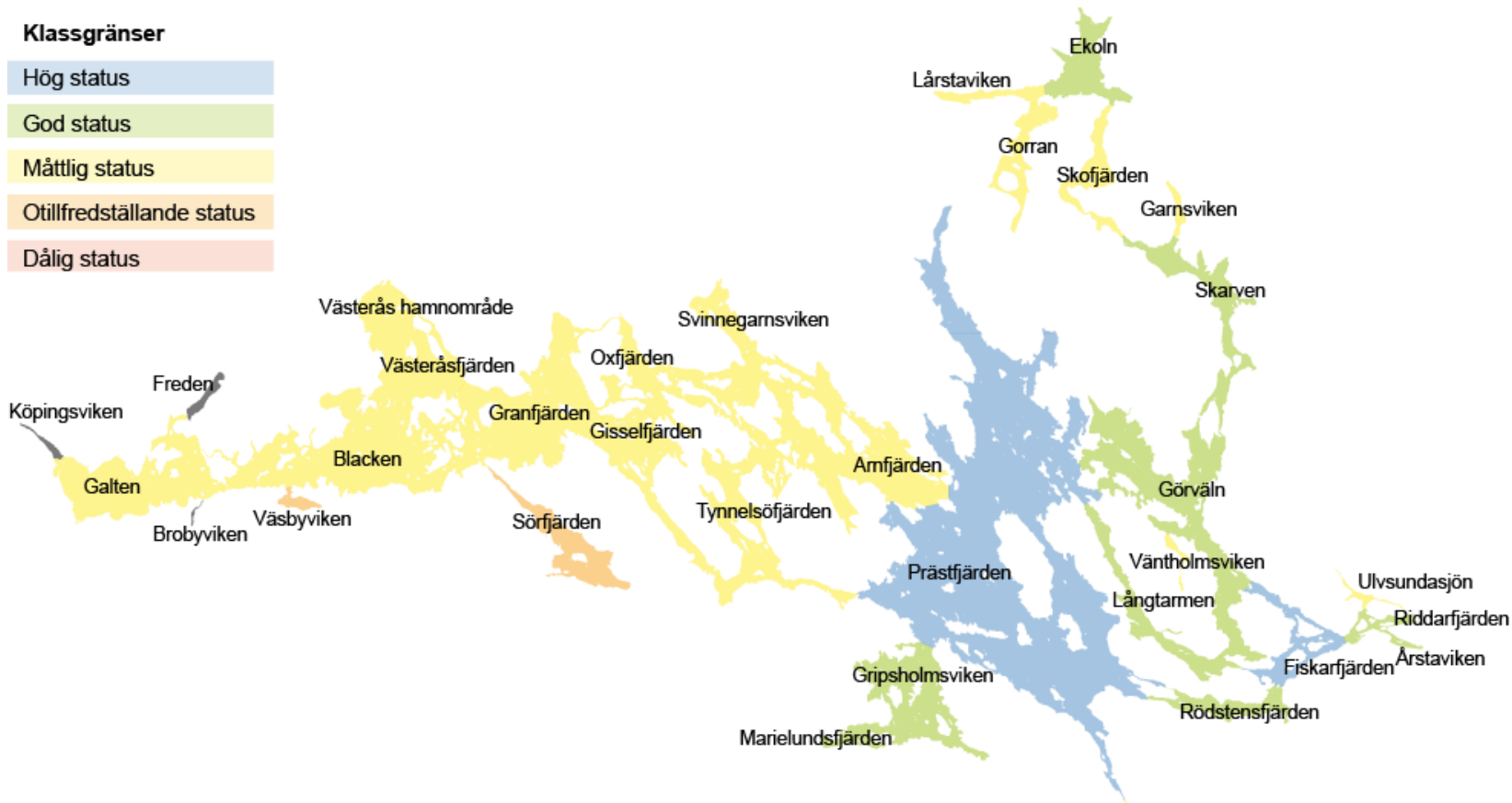


Totalfosfor i Mälaren (synoptisk)

2008-2010

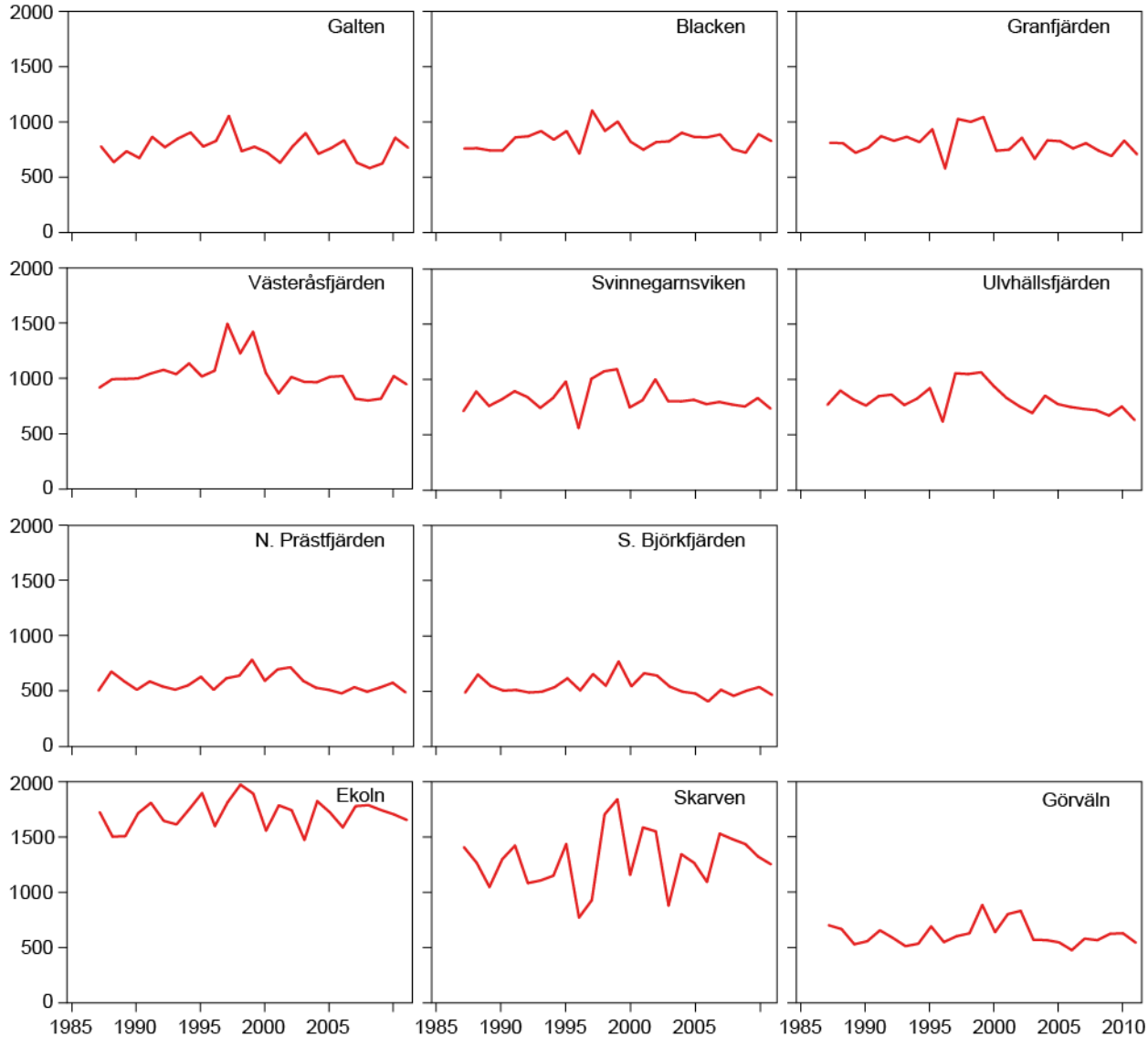
Klassgränser

Hög status
God status
Måttlig status
Otillfredställande status
Dålig status



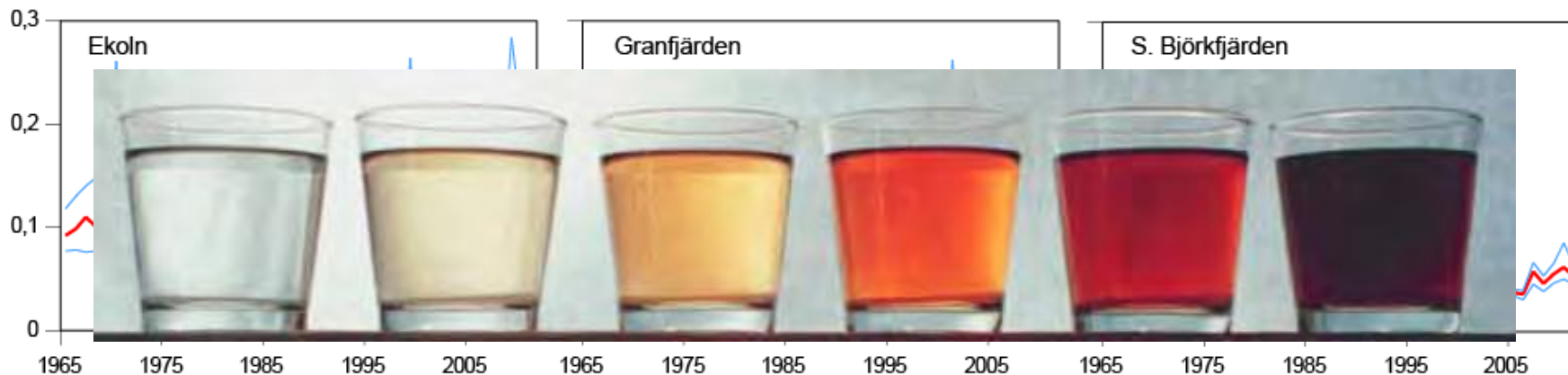
Totalkväve i Mälaren

Totalkvävehalter 1965-2011
 $\mu\text{g N/l}$

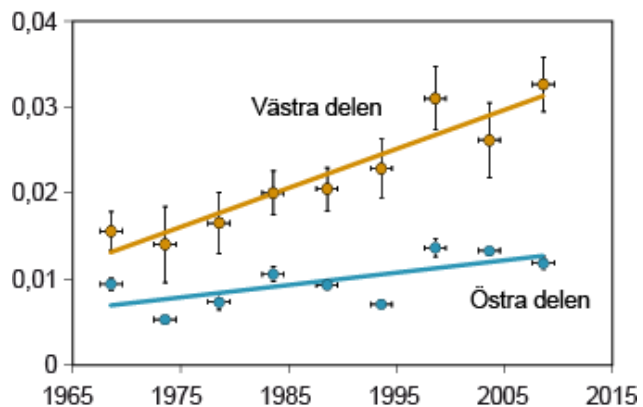


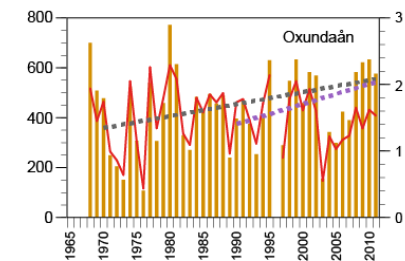
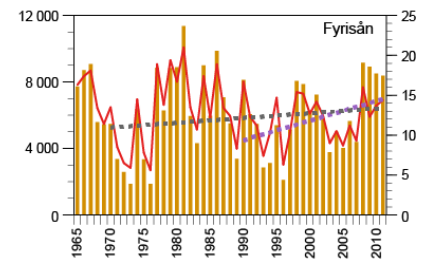
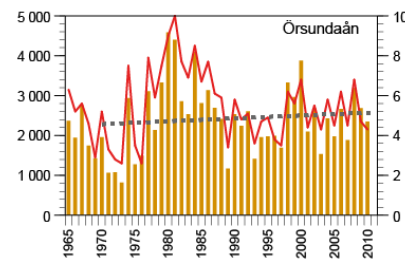
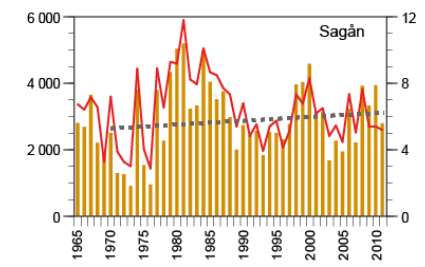
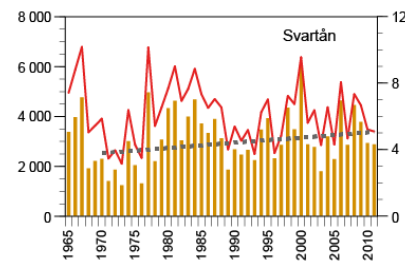
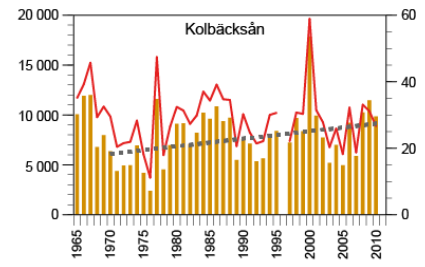
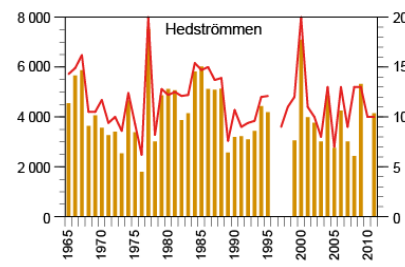
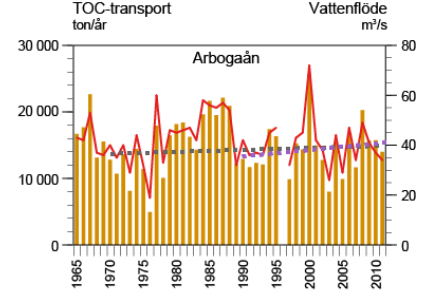
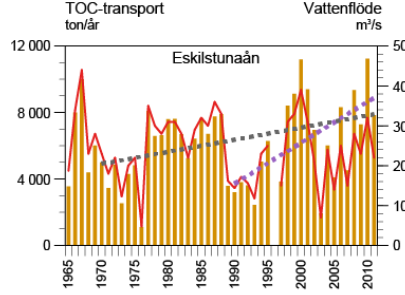
Brunifiering i Mälaren

Absorbans filtrerat prov 1965-2011
420nm/5cm



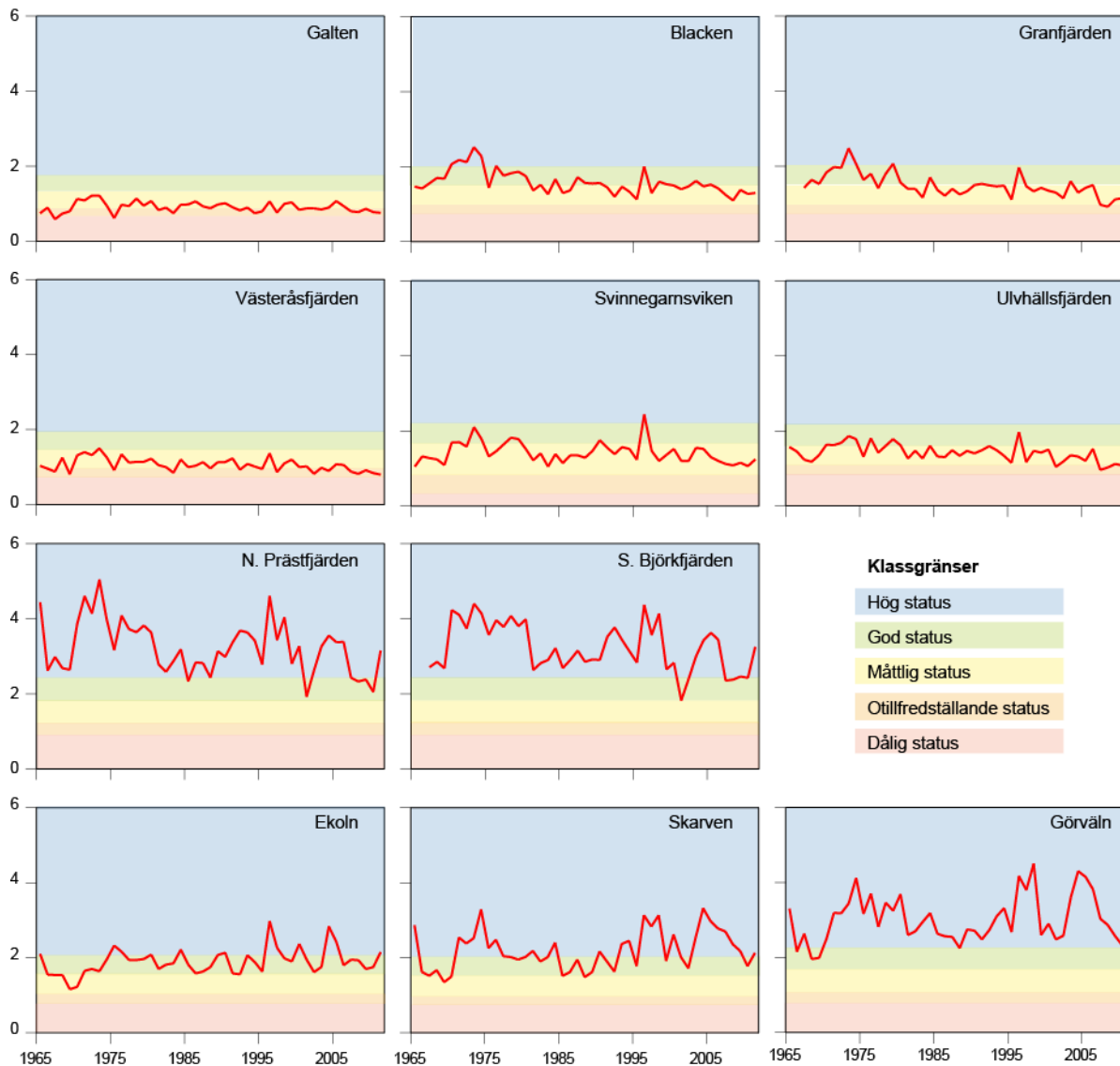
Absorbans filtrerat





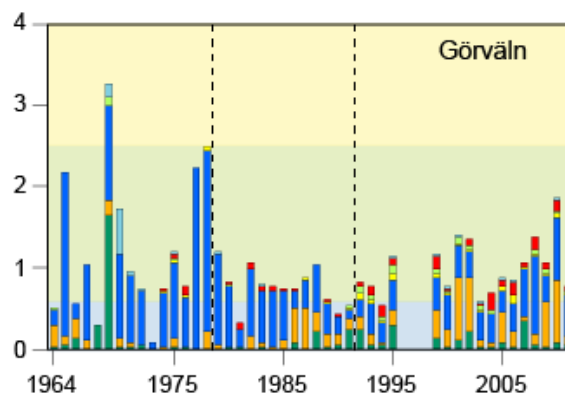
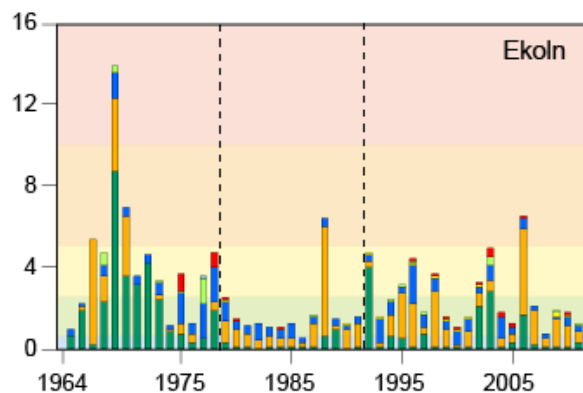
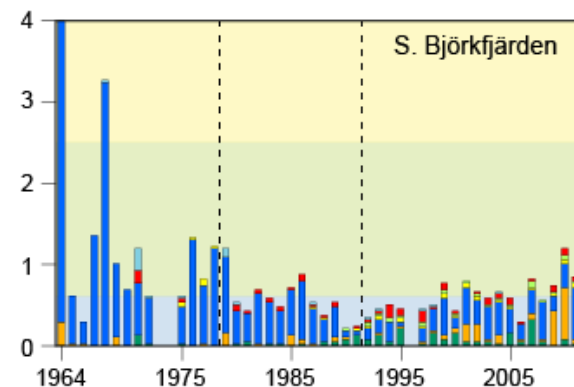
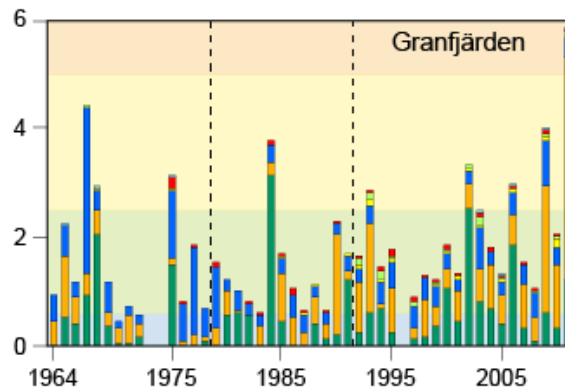
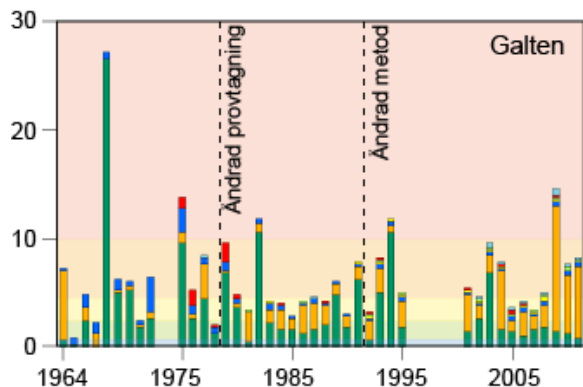
Siktdjupet i Mälaren

Siktdjup maj-okt 1965-2011
m



Växtplankton i Mälaren

Biovolym växtplankton
mm³/l



Klassgränser

Dålig status

Otillfredställande status

Måttlig status

God status

Hög status

Cyanobakterier

Kiselalger

Cryptofycéer

Gulalger

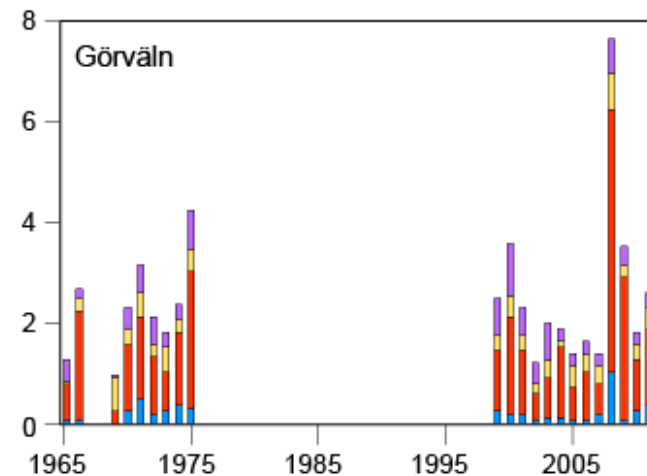
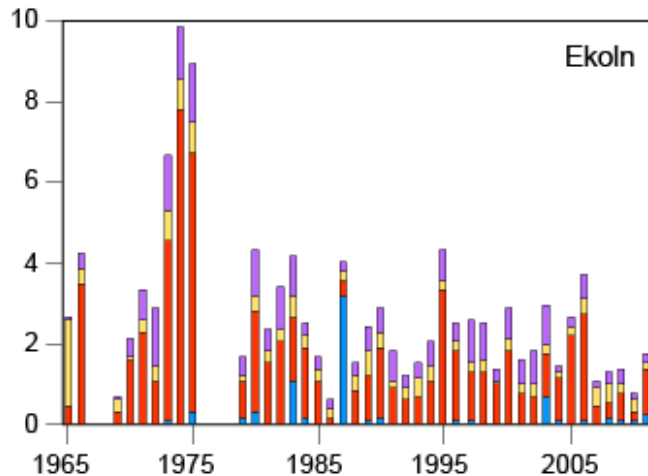
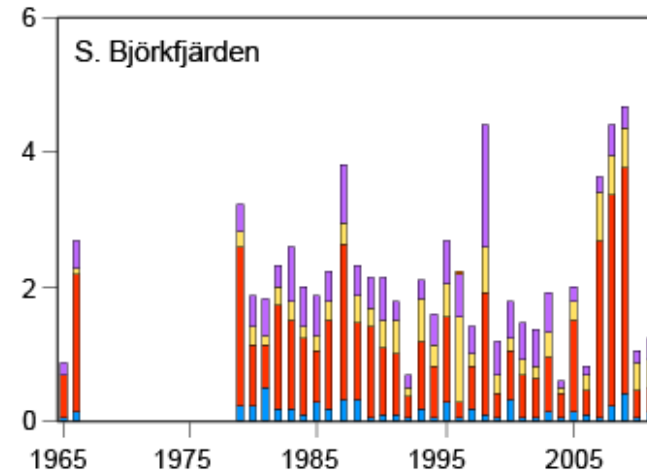
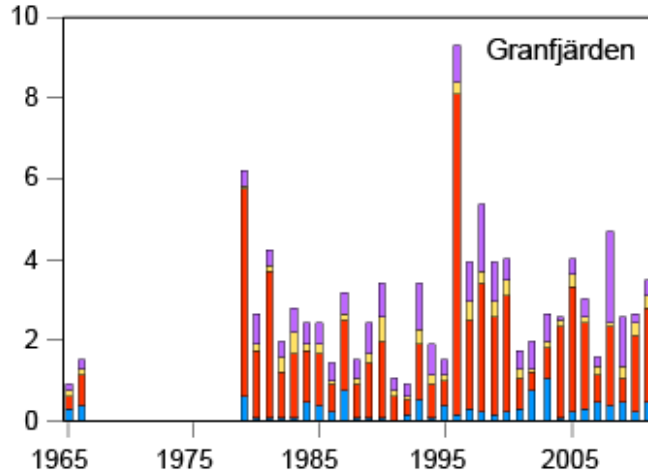
Grönalger


Dinoflagellater


Övrigt


Djurplankton i Mälaren


Biovolym djurplankton
mm³/l



 Hjuldjur

 Hinnkräftor

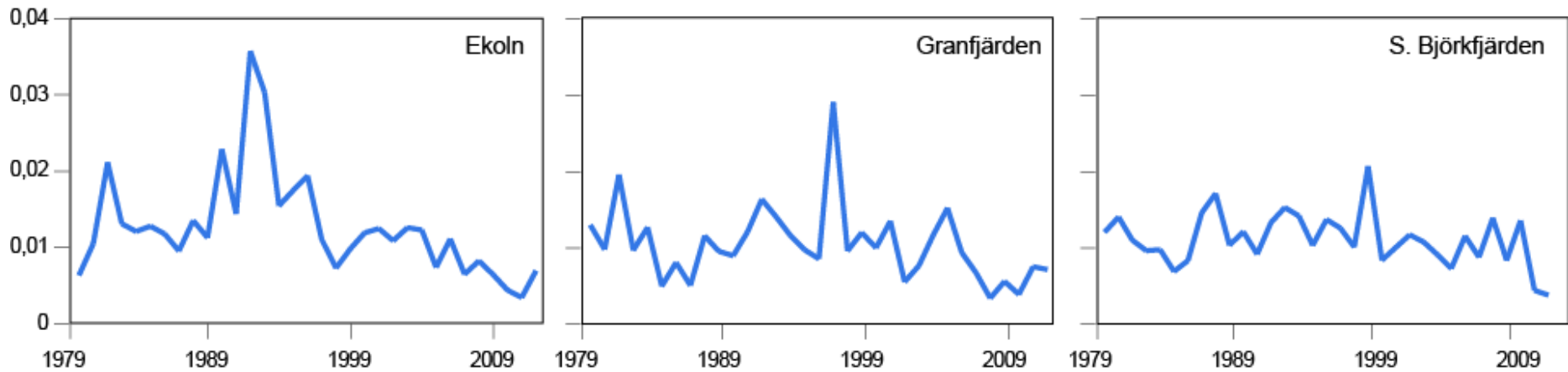
 Hoppkräftor
(Calanoida)

 Hoppkräftor
(Cyclopoida)

Djurplankton i Mälaren



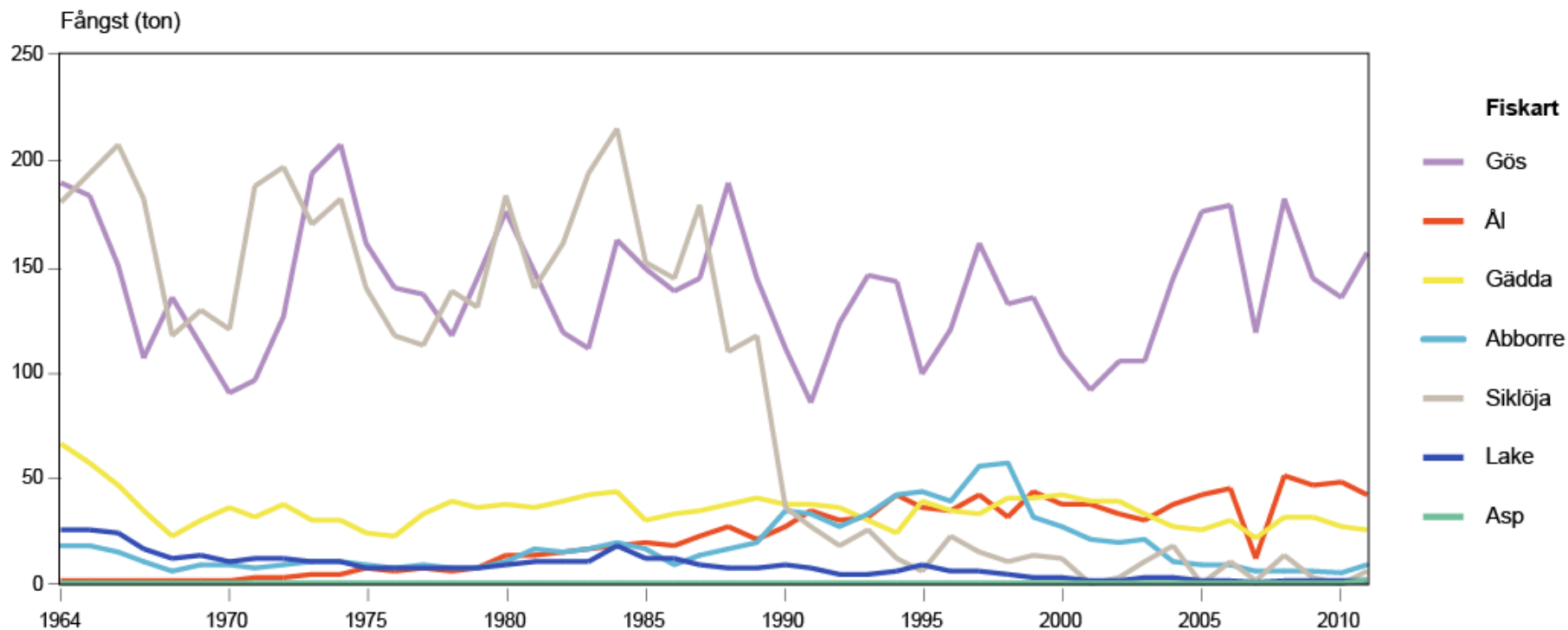
Medelstorlek
mm³/individ



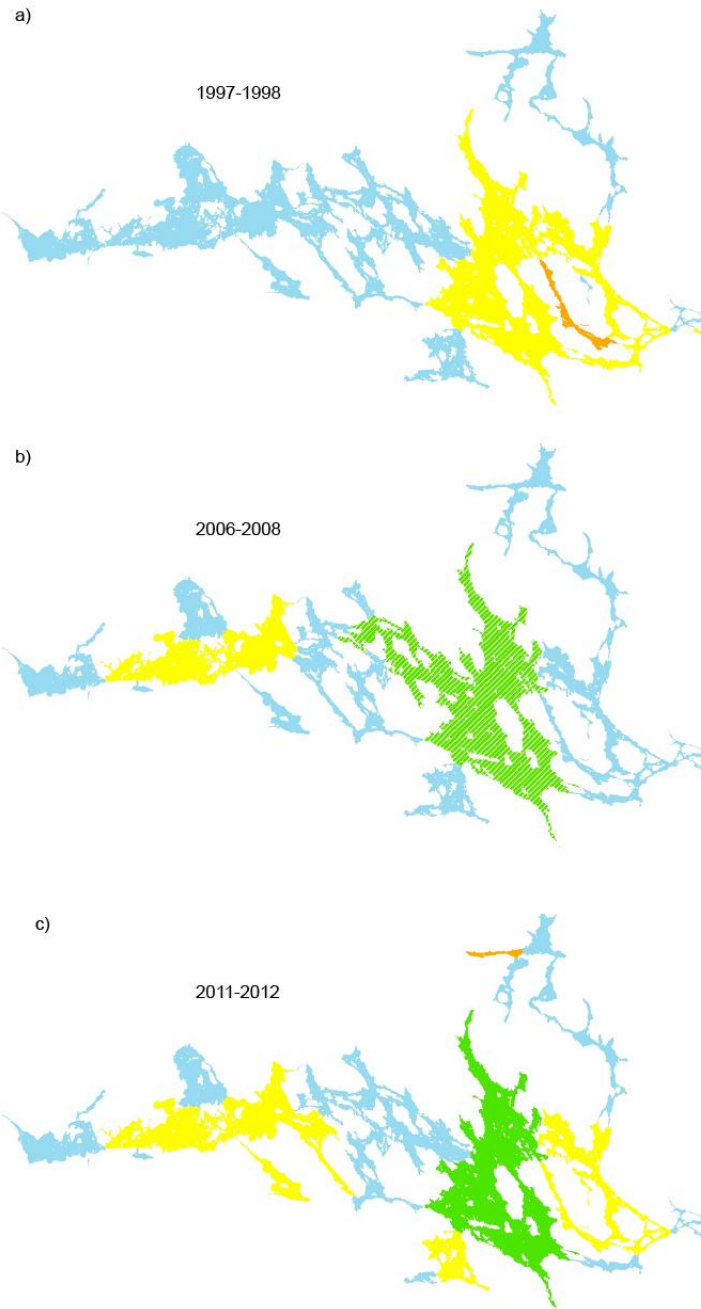
Bottendjur i Mälaren



Fisk och fiske i Mälaren



Vattenväxter i Mälaren



Främmande arter i Mälaren



Främmande arter i Mälaren

Svenskt namn Art eller grupp	Latinskt namn	Införselvektor	Lista
Ålnematod	<i>Anguillicola crassu</i>		D, N
Kräftpest	<i>Aphanomyces astaci</i>		D, N, G
Laxdjävul	<i>Gyrodactylus salaris</i>		D, N
Rotatorie	<i>Kellicottia bostoniensis</i>		
Kalmus	<i>Acorus calmus</i>		
Vattenpest	<i>Elodea canadensis</i>	akvarier/dammar	D
Smal vattenpest	<i>Elodea nuttallii</i>		E
Sjögull	<i>Nymphoides peltata</i>	akvarier/dammar	G
Glattmask	<i>Branchiura sowerbyi</i>	barlastvatten/skrov	
Glattmask	<i>Limnodrilus cervix</i>	barlastvatten/skrov	
Glattmask	<i>Potamothenix bavaricus</i>	barlastvatten/skrov	
Glattmask	<i>Potamothenix bedoti</i>	barlastvatten/skrov	
Glattmask	<i>Potamothenix heuscheri</i>	barlastvatten/skrov	
Glattmask	<i>Potamothenix moldaviensis</i>	barlastvatten/skrov	
Glattmask	<i>Potamothenix vejvodskyi</i>	barlastvatten/skrov	
Ullhandskrabba	<i>Eriocheir sinensis</i>	barlastvatten/skrov	D, N, G
Signalkräfta	<i>Pacifastacus leniusculus</i>		N
Tusensnäcka	<i>Potamopyrgus antipodarum</i>		G
Vandarmussla	<i>Dreissena polymorpha</i>		D, N, G
Karp	<i>Cyprinus carpio</i>		G
Regnbåge	<i>Onchorhynchus mykiss</i>		N, G
Bäckröding	<i>Salvelinus fontinalis</i>		D, N

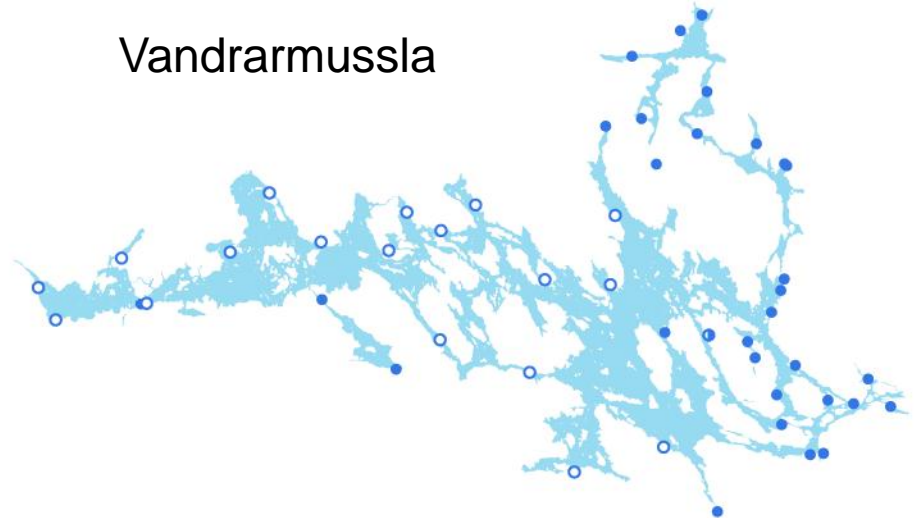
Främmande arter i Mälaren



Sjögull

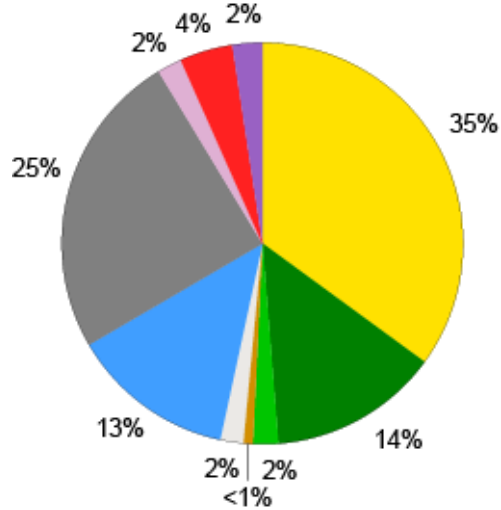


Vandrarmussla



Varifrån kommer näringsämnena?

Kväve



Fosfor

