

# Wetland Jubilee – 20 years with wastewater treatment wetlands in Sweden!

In 1993, the first wastewater treatment wetland in Sweden was put into operation, Brannäs wetland in Oxelösund. During subsequent years, a few more large treatment wetlands were constructed, in Hässleholm, Nynäshamn and Eskilstuna. What have we learnt about their treatment capacities, functions and management needs during those 20 years? How should we design and construct wetlands for future needs? What can we learn from other countries and what can they learn from the Swedish experiences?



*Wetland Alhagen, Nynäshamn, in operation since 1998. Photo: Marcus Nilsson.*

The 20 year celebration takes place May 22-24 2013, in the form of a conference in Nynäshamn with speakers from Sweden, The Netherlands and Ireland, and a half day international scientific workshop as a side event (see program below). The program covers experiences from two decades of operating treatment wetlands after municipal wastewater treatment plants, the role of wetlands in holistic water management in Ireland, wetlands for biomass production in Trelleborg, and field visits to two of the oldest wetlands in Sweden – the wetlands in Nynäshamn and in Oxelösund. The conference program is designed to suit both technical staff and researchers interested in treatment wetlands.

**Welcome!**

## **PROGRAM**

### **Wednesday May 22**

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| <b>9.00-12.00</b>  | International researcher workshop (side event)   |
| <b>13.30-14.00</b> | <b>Registration</b>  |
| <b>14.00</b>       | <b>Bus from hotel Nynäsgården to Wetland Alhagen.</b>  |
| <b>14.30</b>       | <b>Wetland Alhagen celebrates 15 years!</b><br>Daniel Arnborn, Commissioner, Nynäshamn municipality. |
| <b>15.00-17.00</b> | <b>Guiding in the wetland, thematic groups.</b>  |
| <b>17.00-17.30</b> | <b>Walk back to hotel Nynäsgården.</b>   |
| <b>18.30</b>       | <b>Cocktail reception and posters</b>  |
| <b>19.00</b>       | <b>Jubilee dinner</b>  |

## **Thursday May 23**

- 8.00-9.00**      **Coffee and registration (new participants)**  
**Poster session**
- 9.00-9.50**      **Landscape-scale water management in Ireland:  
The integrated constructed wetland (ICW)  
concept.**  
Dr Rory Harrington, Waterford County Council,  
Waterford, Ireland
- 9.50-10.20**      **COFFEE and poster session.**
- 10.20-11.10**      **15 years with Waterharmonica in The  
Netherlands**  
Ruud Kampf, Free University of Amsterdam,  
Rekel/Water and Rob van den Boomen,  
Wittveen en Bos, Holland.
- 11.10-12.00**      **Long term efficiencies, management needs and  
costs in Swedish wetlands for tertiary  
wastewater treatment.**  
Linda Flyckt, Ragn-Sells AB och Karin Tonderski,  
Linköping University.
- 12.00-13.00**      **LUNCH**
- 13.00-14.45**      **Parallel programs: Mini-seminar and  
workshops in groups**
- 14.45-15.00**      **COFFEE break**
- 15.00-15.30**      **Kristalbad - practical experiences, why a  
Waterharmonica?**  
Peter van der Wiele, Waterschap Regge en  
Dinkel.
- 15.30-15.50**      **The effect of wetlands on concentrations of  
pharmaceuticals**  
Magnus Breitholtz. Dep. of Applied  
environmental science, Stockholm University.
- 15.50-16.15**      **Wetland plants as a substrate for biogas  
production in Trelleborg**  
Matilda Gradin, Trelleborg municipality
- 16.45-17.00**      **Final discussion – what is the future role of  
wetlands in wastewater treatment?**  
Conclusions from the afternoon workshops are  
presented and discussed.
- 20.00-22.00**      **Evening activity: Bird excursion in Wetland  
Alhagen**



## **Friday May 24**

<b>8.30</b>	<b>Bus to Brannäs wetland, Oxelösund.</b>
<b>10.30</b>	<b>Guiding in Brannäs wetland</b>
<b>Ca 12.30</b>	<b>LUNCH in the field</b>
<b>14.00</b>	<b>Return trip to Nynäshamn or Stockholm.</b>

Minor modifications in the program schedule may occur.



## **INFO AND REGISTRATION**

### **Venue**

Nynäsgården Hotel and Conference, [www.nynasgarden.se](http://www.nynasgarden.se), Telegrafgatan 41, Nynäshamn. Nynäsgården is walking distance from the train station for local trains from Stockholm (ca 1 km), Train stop Nynäs Gård.

### **Price**

The price for the conference (three days) is 5300 SEK, including coffee breaks and lunch during the conference and the dinner on Wednesday May 22. The price for two days (22-23 or 23-24 May) is 4100 SEK; in which case the dinner is booked separately. Student price is 2400 SEK for three days and 1800 SEK for two days, provided a valid student card can be shown. Please observe that prices are exclusive VAT, and are valid for payment before April 19th.

For registration and payment after April 19th, the price for three days is 6200 SEK, and for two days 5000 SEK.

### **Registration**

Registration can be done on [www.wrs.se](http://www.wrs.se). Last day for registration is May 13th.

### **Dinner**

The Jubilee dinner is served at hotel Nynäsgården on May 22nd kl 19.00.

### **Posters**

Poster presentations are very welcome, and you can register a poster title when you register for the conference. It is also possible to register a poster presentation after the conference registration but not later than May 13th. Instructions for poster preparations can be found at [www.wrs.se](http://www.wrs.se).

### **Accommodation**

You book your accommodation yourself; a number of rooms will be available for conference participants at Hotel Nynäsgården until April 22nd – please check at [www.nynasgarden.se](http://www.nynasgarden.se)

### Language

The conference will be held in Swedish and English. For the group workshop, you choose either a Swedish or an English speaking group. Presentations will be translated to both languages.

### Practical advices

For the field visits, remember to bring good shoes and appropriate clothes, as we will be walking along the wetlands.

### Transport

Bus will leave from Hotel Nynäsgården to Wetland Alhagen on Wednesday May 22nd at kl 14. We walk back from the wetland (ca 20 min).

On Friday, May 24th, we will depart by bus to Oxelösund. After the field visit, there will be bus transport back to Nynäshamn or to Stockholm Central. You mark your choice of destination when you register.

### International scientific workshop – side event

On Wednesday May 22nd, there will be an international scientific workshop. This is

organized by Karin Tonderski, Linköping University and Stefan Weisner, Halmstad University. If you are interested in participating, contact Karin Tonderski, e-mail: [karsu@ifm.liu.se](mailto:karsu@ifm.liu.se) , tel: +4613284467 or +46 708103128.



### More information

More information can be found on [www.wrs.se](http://www.wrs.se).

If you have questions related to the program and/or conference organization, please contact Ebba af Petersens, [ebba.af.petersens@wrs.se](mailto:ebba.af.petersens@wrs.se) , tel. +46 18 17 45 44, cell. +46 708322 755

### Organizers

This jubilee conference is arranged by Nynäshamn municipality, WRS Uppsala AB and Oxelö Energi in cooperation with Stefan Weisner, Halmstad University, Karin Tonderski, Linköping University and EviEM, Mistra Council for Evidence-based Environmental Management.



NYNÄSHAMN



Våtmark Alhagen



Oxelö Energi

**WRS**  
Water Revival Systems

MISTRA  
**EviEM**  
MISTRA COUNCIL FOR  
EVIDENCE-BASED ENVIRONMENTAL MANAGEMENT