

Wetland Management and information 2003-2004



Guidelines of Žuvintas wetland management and monitoring

Wet meadows

Wet grassland or meadows provides important habitats for many animals and plants. Aside from their importance for biodiversity conservation and wildlife, wet meadows are important for other reasons, both historical and recent years. Nowadays there have been increasing awareness of the value of the hydrological and chemical functions of wetlands.

The economical value of using wet meadows for mowing and/or grazing decreased and ceased in agriculture activities after developing and increasing their effectiveness during 1950:s and 1960:s. The result of ceased management was negative for biodiversity conservation and the meadows was overgrowing by higher plants and bushes, *Salix sp* and trees, *Alnus* and *Betula*. Breeding wading birds and ducks species were replaced by other bird fauna benefitted by overgrowing.

Therefor, vegetation management in the form of mowing and/or grazing is necessary to maintain nearly all wet grassland, as it prevent the invasion of woody species and natural succession to woodland. Vegetation management is usually a part of an agricultural system that use primary production to support domestic herbivores either directly through grazing (pastures) or indirectly by producing food for cattle (meadows). Pastures are usually grazed by cattle or sometimes by horses or sheep, a form of management prevelant on many wet grasslands. Meadow management consists of mowing for hay. The re-growth can therefor be grazed.

The continued existence of wet grassland site is also dependent on the maintenance of an appropriate water regime. Where possible, a near natural hydrological regime should be maintained. Management of a wet grassland site also to take into account other associated habitats.

Some wet meadow or grassland sites will have greater potential than others depending on different factors. Site evaluation is therefor important to determine current wildlife interest and identify potential for enhancement and restoration. It is also necessary to identify any legal, technical and financial factors that might constrain management options. All management undertaken should be subject to monitoring. The ability to modify management in the light of results from monitoring is essential if any unforeseen, undesirable effects are to be reversed.

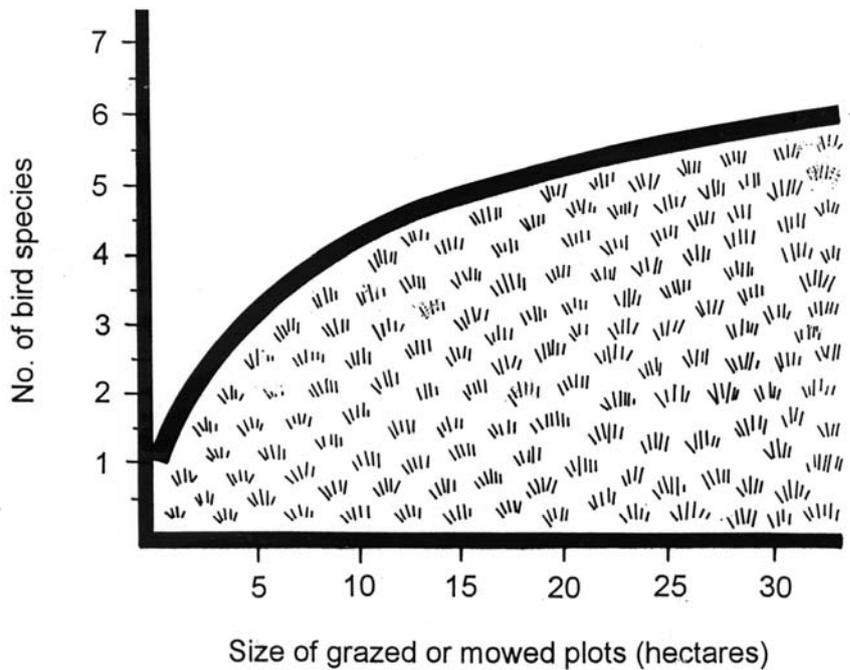


Figure 1. The number of breeding birdspecies increase with the size on the managed wet grassland (From Alexandersson et al 1986).

Biodiversity

Wet meadows support considerable biodiversity comprising rare and threatened plant and animal species and communities, including nationally and internationally important bird populations and a range of mammals, invertebrates, reptiles and amphibians. Diversity is particularly high where two biotopes meet, for example where reedbed grades into wet grassland.

Wet grassland support a wide range of plant communities maintained by a regime of grazing and/or cutting. Botanical diversity can be high and a number of threatened and declining species are associated with wet grassland. The different plant communities attract a wide range of different species of butterflies and other insects, all specialized on group of plants or on species.

Birds

Waders breed in wet meadows are mostly feeding on insects in small waterbodies. They also feed on wet grassland where the grass is short in length or within areas with scarce vegetation.

They usually put there nests i drier areas or in shelter of any tussock. A mixture of big areas with short lengt of grassland for feeding and areas with tussocks to put their nests is more or less to optimize wet meadows for breeding waders

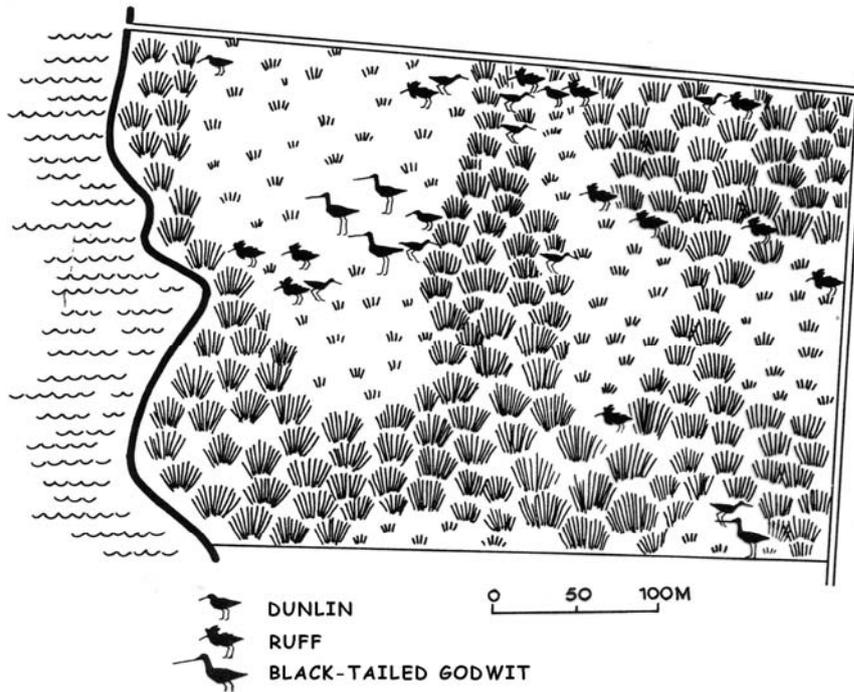


Figure 2. The breeding waders prefer to put their nests in areas with short and scarce tussocks in the zone between rich areas of tussocks and areas without them. (From Alexandersson et al 1986).

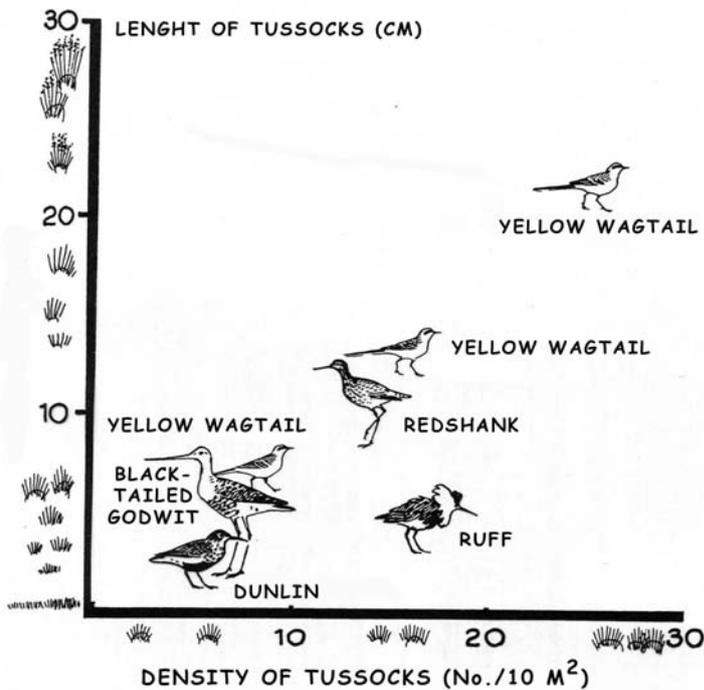


Figure 3. Both the density and the length of the tussocks are important when waders choosing nest sites. These factors are very important when evaluating the management of a wet grassland for breeding waders. (From Alexandersson et al 1986).

The height of the vegetation are another key factor when restoration and manage wet meadows. The height of vegetaion differ dependent on species of breeding wader. The snipe, *Gallinago media*, may have rather dense tussocky vegetation, only if the ground is wet. Other species like Dunlin *Calidris alpina schinzii* prefer very well grazed areas with small plots without any vegetaion at all. On the other hand Lapwing, *Vanellus vanellus*, redshank, *Tringa totanus*, ruff *Philomachus pugnax* and Bar-tailed godwit *Limosa limosa* seems to breed in areas with some higher vegetation comparing with Dunlin. But they are not able to breed if the meadow is ungrazed or not moved. Lapwing have big difficulties to walk around when the vegetation is higher than 10 cm.

The presence of trees and bushes, which provides observation points for predatory bird greatly reduces productivity by predation. Crows are experts in predate eggs from nests of wading birds and they usually using trees and bushes as observation points, so therefor it is very important to take trees away from the meadow. Wading bird avoid breed closer than about 100 meter from trees and in several occasions they avoid breeding at all on wet meadows with trees or just one.

A high soil water table or presence of small waterbodies during breeding season is the single most important factor. It ensures that soil invertebrate prey, mainly Lumbricidae and Tipulidae larvae, remains close to the soil surface and increase the biomass available to boirds. Also surface water, very shallow and muddy channels and pool margins are important feeding areas for both adult and young birds. Ephemeral waterbodies provide suitable conditions for colonisation by high biomass pioneer invertebrate communities, dominated by Chironomidae. These are important food sources for young waders.

Wet meadow management

Establishing a management regime due to the conservation aims of a wet grassland site while maintaining a sustainable agricultural activity is a challenge. Decisions need to be made whether to use grazing or moving or a combination. Both require decisions about timing, technique, historical way of using wet meadows and intensity of management

Grazing

The most natural and beneficial form of grassland management for wildlife is grazing, a process which has facilitated a wide range of different plant communities. The most beneficial with grazing is creation of structural diversity and prevents expansion of course species and the invasion of woody plants. Also the costs of manage grassland with grazing is much less than moving.

The cattle is are the most prefered grazing animal because they are more tolerant of wet conditions and relatively unselective in their grazing comparing with sheep and horses. Cattle trample grassland vegetation and create bare areas, particularly in softer ground, creating neches for early succesional plant end invertebrates. They are selective in grazing and avoid plant speciecs that are not tasty. They also tend to produce more tussocky sward, for instance the grass plant *Descampsia flexuosa*, wich is not favourable for grazing. To much tussocky area is not an optimum breeding area for waders (figure 2)

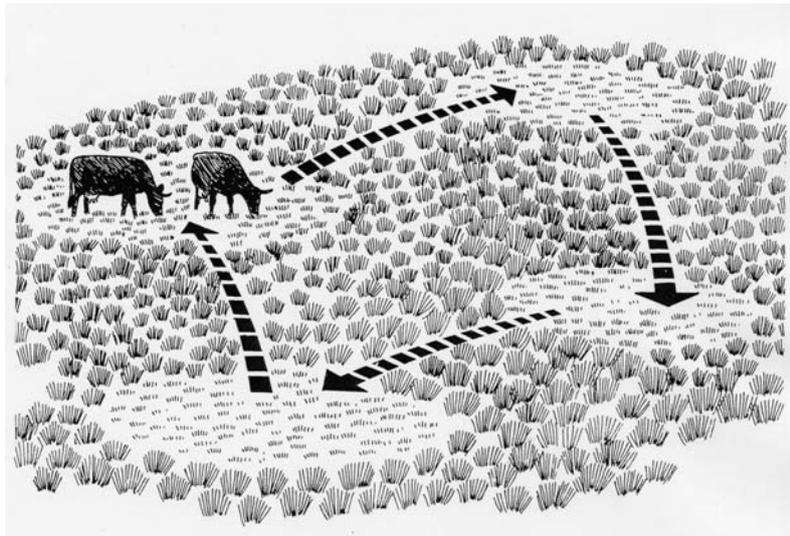


Figure 4. Cattle are selective in grazing and prefer young plants. They also improve the grazing by rotation from grazing one spot to another. That kind of grazing creates a mosaic of shortly grazed areas together with areas where there is none or little grazing pressure. Therefore more cattle need. (From Alexandersson et al 1986).

Store cattle, young stock or suckler cows are particularly well suited to wet grassland. Dairy cattle shall not graze wet meadows because they require high levels of nutrition and are not suitable for managing natural or semi-natural grasslands. They are also dependent on special requirements for shelter and feeding. Livestock with only young cattle are more active than older animals, therefore they are probably a greater trampling threat to ground-nesting birds.

Deciding on the correct stocking density is essential and failure to achieve this is a common factor in reducing the conservation value. The density number of cattle per unit differs depending on several factors as different kinds of livestock, plant community, grassland productivity, soil type, hydrology and climate. Climate such as rainfall and temperature have a great impact on productivity and nutrient. Additional feed is often necessary to sustain livestock in a wet grassland system, especially in late autumn. Because this can represent an important source of nutrients, extra feeding should take place on sacrificial areas where nature conservation interest is less important.

Table 1. Recommended stocking density on wet grassland during a normal grazing season, 130-140 grazing days/year.

Stock type	No of livestock per ha
Cattle	
Cattle (0-1 year)	2,2
Cattle (1-2 years)	1,6
Cattle (> 2 years)	1,6
Cattle with calf	0,7
Horse	
Horses	1,0
Ponies	0,5
Sheep	

Ewe (60 kg) with 2 lambs	3,0
--------------------------	-----

The health of livestock is also important to take care especially when starting up with grazing. All livestock should have access to fresh water daily. Standing water within the grassland can produce lungworm in cattle and liver fluke infection in sheep and cattle. So regularly inspections of the livestock is therefor recomended.

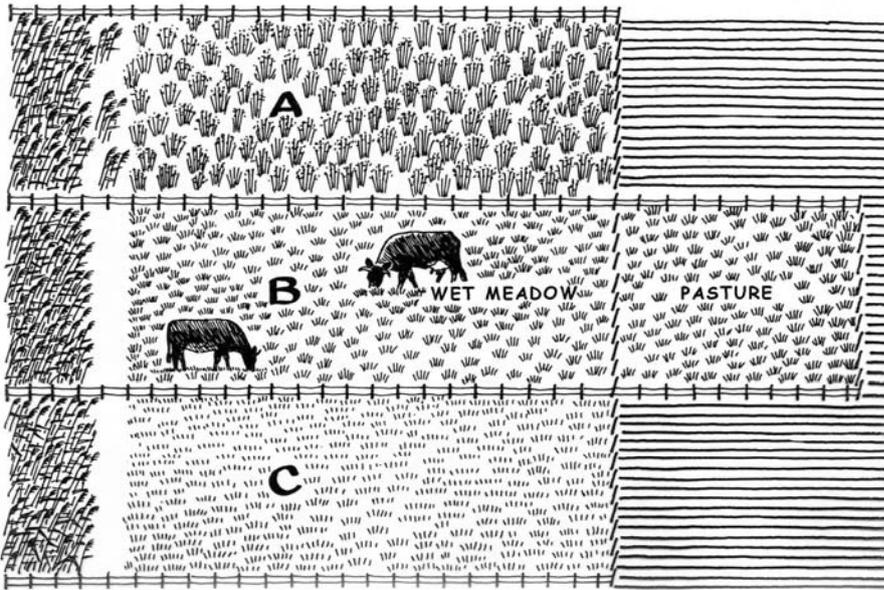
Topping can combine with grazing. It consists of mechanical cutting aimed at removing coarse or excessive vegetation often in wet grassland. Sometimes the livestock avoid som plantspecies or the density of the livestock has been limited, the topping is a good complement to grazing.

Mowing

Mowing is a management method with long traditional links with many wet grassland areas. Areas managed in this way often support botanically diverse swards as mowing trends to favour forbs at the expense of grass species. It involves the cutting of standing vegetation and its removal for use as livestock food. In contrast to grazing, mowing is non-selective and the vegetation is cut to a uniform height. Mowing is an effective wet meadow management method in terms of nature conservation.

Mowing is to prefer when the wet grassland sites are small, isolated and difficult to graze throughout the whole grazing season. When the grazing season is very short, much less then 140 grazing days dependent on too wet conditions for livestock in the beginning of grazing season then mowing is to prefer. When grazing starts too late in season, in the beginning of July, the grass is often too old for grazing then mowing is preferable. Another advantage of mowing is decreasing nutrient levels in the soil, favouring a diversity of less productive plant species. The mowned wet grassland vegetation should always be removed, otherwise the hay will be a nutrient source in the wet grassland and plants that are unfavoured by livestock will sooner or later dominate.

Mowing followed by grazing is effective to take away the regrowth. This is effective way when an area is grazed very hard in the early season and you need to move the livestock to other areas. Therefor it's valueable to divide the wet meadow to a couple of smaller areas. One part can be grazed, the other can be mowed and the third is not managed at all. Next year you circulate the management so instead of grazing it's better for mowing and so on.



Fence area	Year 1,2 and 3	Year 4,5 and 6	Year 7,8 and 9
A	No management	Moving	Grazing
B	Grazing	No management	Moving
C	Moving	Grazing	No management

Figure 5. Example on circulation of different management methods on a wet grassland if lack of cattle (From Alexandersson et al 1986).

Burning

Burning is very efficient when restoring wet meadows which has not been managed for many years. It's important directly after burning to manage the area with either grazing or mowing, because the burning has no long time effect. It is also a convenient and cost-efficient method for removing large areas of coarse vegetation. Burning during February, March and low- water season in September/October is potentially least damaging to the conservation interest of wet meadows. But be very careful when burning because the security have to put first. The wind direction must be convenient so the fire moves at the right way. Also wind speed may not exceed 8-9 m/s. The optimum speed of the wind is 4-6 m/s. Reed is suitable for burning especially when the ground is not too wet and there is a lot of vegetation course.

Water level control

Natural flood regimes are rare as a result of human activity particularly for agriculture intensification and flood defence. The degree of flooding decides the size of a wet meadow. The more flooding area around a lake the size of the wet meadow will be bigger. A very fluctuated water level containing high spring flood water level and low summer water level create a large number of diverse wetland vegetation. The ice cover is important when flooding the lake and its surrounding wet meadow because it's hard and prevent reed vegetation for growing. A stable water regime is on the other hand benefitting the overgrowing of the wetland by reed, especially Phragmites-reed.

To benefit a rich and diverse flora on wet meadows it is important to improve or maintain the natural flooding in the lake or stream. The flooded wet meadow is therefore attractive for both resting wildfowls and breeding waders.

Rotavation

This is an effective method for destroying Phragmites-reed before raising of waterlevel when restoration lakes or inland wetlands. When using rotavation the rhizomes of reed are killed by knives on the rotavator. Normally, the best efficient method is rotavation on a depth of about 30 cm in the mud. In sandy bottoms you have to increase the depth to more than 30 cm, because the rhizomes are growing deeper.

Rotavation can also be used when restoring carex-tussocks vegetation on wet meadows. The rotavator can then be used together with a tractor. Here it is important to take away just the tussocks and not destroying the rhizomes of the vegetation. The groundlevel will then be even and next year grazing or mowing is possible.

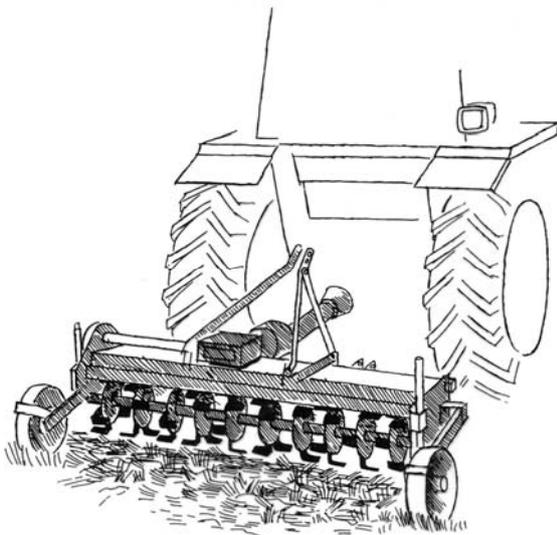


Figure 6. By using a rotavator it is possible to restore and improve wet meadows by destroying tussocks. Next year the meadow can be used by grazing or mowing. The rotavator can be equipped by different kind of knives instead for destroying Phragmites-rhizomes. (From Alexandersson et al 1986).

Monitoring Wet meadows

Monitoring is an essential part of conservation management activities. Without monitoring, the effectiveness of management can not be assessed. The level of monitoring depends on the amount of resources and can fluctuate a lot from for instance just notice there are breeding waders to monitor breeding waders using standardised techniques.

The three main groups of monitoring is vegetation communities, birds and management activities. For monitoring management it is valuable to record all management undertaken, eg moving dates, grazing pressure and no of cattle. Grazing pressure can be recorded by counting the no tussocks in a specific area or measure the length of the grass after grazing season. The length should not exceed 5-8 cm. Otherwise wading birds have difficulties to use the area for breeding.

When designing a site-monitoring system a couple of questions must be considered. For instance ; What are the objectives of the monitoring system? What should be monitored? What methodologies should be chosen?

The lake

Shallow, eutrophical lakes are generally characterized by either abundant submerged plants and clear water at relatively low nutrient concentrations or by abundant phytoplankton and turbid water at higher nutrient concentrations. These two different states are called clearwater state and turbid water state. These two states can exist in the same lake and occurs in longer or shorter periods. Each of the states will be stable until a disturbance large enough to override the self-stabilizing capacities causes a shift to the other state. This disturbance can affect different parts of the ecosystem. The different stable states is showned in figure 7 where the size of different boxes causes ecological effects on other boxes from a clearwater to the turbid water state.

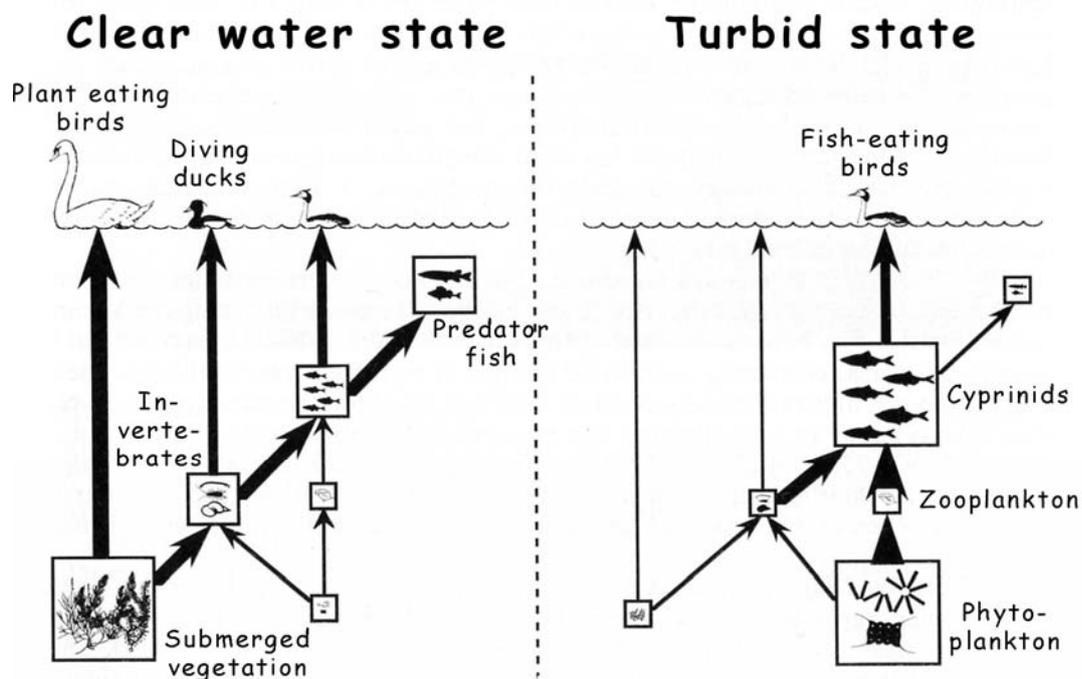


Figure 7. Generalized description of food chains in the two different stable states in shallow, eutrophic lakes. The most favourable state for waterfowl is shown to the left, with abundant food in terms of invertebrates and submerged plants. Squares indicate biomass and arrows flows of biomass or energy. (From Andersson et al 1990)

As shown in figure 7 waterfowl numbers are especially very closely related to the occurrence of submerged vegetation and low numbers of cyprinid fishes. The objective for bird-rich eutrophic lakes is often to maintain them as sustainable with a diverse and rich birdlife. Therefore, these lakes should appear as clearwater state and not turbid water state.

Problems in Zuvintas

The lake does not keep breeding birds even though that it seems to have the potential.

Why have lake Zuvintas so low bird productivity?

- To little *Chara sp.* vegetation which normally provides a lot of shelter and food resources for invertebrates. *Chara* lakes are usually very good bird lakes.
- To little submerged plants can depend on too much periphytic algae. Submerged plants and algae (periphytic and pelagic) compete for light and nutrients. Periphytic algae is believed to be a less problem for *Chara*.
- The light climate can also be disturbed by too much re-suspended sediments in the lake. This is known periodically to be a problem in shallow waters both in fresh as well as saline waters.
- High water level in late spring when submerged plants are starting growing may lead to a reduced production and distribution depending on worse light conditions.
- The use of herbicides in the catchment area can stop the growth of the aquatic plants. Some species are more sensitive than others as the *Chara* species.
- The use of insecticides in the catchment area can stop recruitment of invertebrates which naturally will result in stunted breeding among birds how feed their chicks with small invertebrates. The insecticides do probably also kill the crustaceans (zooplankton) how filtrates the water from phytoplankton.
- To little density of piscivorous fishes will even worsen the situation and stabilising the turbid state of the lake when the submerged plants have crashed. The herbivorous and benthivorous *Cyprinides* has to be controlled by a dense piscivorous fish population.
- The beaver *Castor fiber* feeding on the reed belts and other submerged plants might disturb the plant so much that the distribution are effected. Maybe the birds nests might be disturbed or even destroyed.
- To many minks *Mustela vison* which predate on eggs and juvenile birds as well as adult once. There are examples in Scotland, UK where birds have been eliminated by mink. This have also been the case on some of the island in Stockholm's archipelago.

Recomendations

- Minimise the mink populations to an absolute minimum, but don't use poisons!! Other natural predators should absolutely not be decimated or disturbed in the same time.
- Regulate the fishing in the lake. Don't permit fishing in the breeding time especially with nets cause the disturbance and the risk of caching birds in the nets. Demand the fishermen to take up all caught species of *Cyprinides* with no exceptions and re introduce all perch *Perca fluviatilis* longer than 15 cm, all smaller pikes *Esox lucius* up to 2 kg and all sanders *Stizostedion lucioperca*.
- Eliminate all thinkable toxins as insecticides, herbicides and other environmentally dangerous toxins.
- If the hunting is badly regulated in the lake it has to be permitted only a shorter time in the autumns.
- The regulation of the water level in spring has to be in harmony (= low water level) with the production time for submerged plants.
- Minimise the nutrient leakage, especially phosphorus and nitrogen from farming land. The leakage can be reduced by buffering zones as grassland / bushes 10-20 m between farmed ground and drainage ditches etc. that enters into the lake. This means also of cause that sewage water should be minimised.
- Regularly monitoring in the lake is of great importance since the data can be used as a diagnosis of the present status and a guideline for former management. A regular monitoring and analysis can reduce the costs for management of the lake Zavintas.

Ideas about where to find the weak link in missing breeding birds in Zuvintas:

- A) Competition for food?
- B) Predation on the birds?
- C) Abiotic factors as physiochemical environment, disturbance as toxins?
- D) Over hunting and over fishing, including disturbances?
- E) Nesting sites, as disturbed vegetation by beaver?
- F) Problems found in other places than in Zavintas as over wintering problems for migrating birds?

I would search for the explanations among ideas A-D maybe E but the F is less possible because you were missing so many different species of birds in the lake! But toxins?

I recomend for further reading and explanations to Hydrobiologia 279/ 280, 1994, especially page 83-90.

Guidelines on public awareness and information

Jan Mogol
Information Officer
Lake Hornborga, County Administrative Board of Västra Götaland
Sweden

General public awareness raising, public involvement and information strategy

Goals

To create new and maintain old nature reserves we need the approval of the public. Otherwise the politicians *might* cut the foundations.

A Swedish survey tells us that people expect three things above all when they visit a big nature reserve or national park. They want...

1. A good cup of coffee.
2. Clean and nice toilets.
3. A possibility to buy something.

When these needs are fulfilled we have a possibility to reach out with our interesting stories about... whatever it might be.

To attract people we need to think human. Not even devoted biologists have come to the nature reserve to read miles and miles of signs. Visitors in general want to *do* things. During doing (walking, drinking coffee at a nice place with proper tables and so on) we have a good opportunity to tell them a little bit. And – above all – answer the common questions.

There is a modern American word called "infotainment". Obviously a combination of the words *information* and *entertainment*. In some respects they are right, the Americans. Learning must be fun. And learning, when it comes to children, *must be* activities. You can't expect them to walk around in a museum with glass everywhere, sit on their butts and watch a *loooooong* and rather difficult video, then go down to the lakeside and be eaten by mosquitoes - and *enjoy* it. They might do it without complaining, but that is not our goal. We must be able to meet their needs with our own message.

Information and marketing strategy – is important. You need to sit down and write down what you want to do. Now, during the next year and within five and ten years. The strategy have to be evaluated every year.

Main target groups

1. Schools

We suggest you start with the schools – if you have made up your mind when it comes to schools. You have to do it – or not. Something in between is just not good enough. If the answer is yes, then invite teachers on a regular basis. Spend a day together, show them your activities and possibilities. And, of course, ask them about their thoughts and ideas.

2. Birdwatchers

We strongly believe northern European birdwatchers might be an interesting group. No large numbers, maybe, but quite possible to attract. Especially since you have interesting species as Aquatic Warbler and quite a few species that are normally quite rare in Western Europe/Scandinavia. Why don't you spend some time talking to the editors of big birdwatching magazines in Great Britain, Germany, Netherlands, Sweden and so on. Maybe they will write about Zuvintas?

3. Common people (adults)

This is, in some respects, the most important group. To attract this group, coming from cities around, you need good trails, an interesting exhibition, tables and benches in nice areas etc. And – of course – then you have to be open during the weekends. You can't be closed during Saturdays and Sundays. You have to find time and money to open up the building! At least during spring and summer.

Needed infrastructure

You need a lot – but start with the information centre. Make sure you create a good and interesting environment. With some good trails (doesn't have to be long), good signs (you can produce them yourself, with a few short sentences) and a small birdtower/platform. What you need, however, is create a new and nice atmosphere within the building. A lot of empty space at the moment. Shut down, open up and invite.

Later on you need a few good parking places/birdtowers/signs around the lake as well.

Parking places, better roads around the lake, bird towers, trails and signs (your own as well along the roads) are necessary.

Information materials

A good website on the internet. A website that will offer a lot – not only explain. In Lithuanian and English, of course. You also need a good brochure, covering the area. That's about it.

Well, what now? You've got the the brochure and a good site on the internet. How do you spread the word around? The answer is – you need to spend a lot of time marketing your brochure and your website. To schools, tourist offices, clubs, societies etc. Make a list – and make sure you follow what happen with your brochures.

The video, showed in June 2004, was a good example how you can produce a nice video and overkill with information. When it comes to schoolchildren, make it short and talk to the kids in their own language. When it comes to adults – make it short and talk to them in their own language. Save the old one for the specialists. It's good!

Ask yourself and, most important, ask the public what questions they ask themselves when it comes to a nature reserve like Zuvintas. It's a famous reserve – sure they have some common questions. Make a survey in the schools! Make another one among adults. Ask the tourist offices to help out! When you've got the questions – make sure you answer them in and around the information centre. When you've done that you will have a good opportunity to them a little more.

Brochures, videos, websites. All good, all necessary – but nothing can ever compare with meeting someone. This is crucial! You must be there! Including weekends!

Visiting the reserve

Where

The information centre should be the first place to visit in the area. To make it number one you need to make sure you have a good parking place, bird tower (or something similar), a couple of trails (and they need maintenance!), signs and possibilities to visit the information centre indoors. And someone to talk to, no matter if it's a Tuesday or Saturday. If it's not possible to visit the information centre indoors (a cold Monday in December, for instance) you need some sort of outdoor information centre – close to the parking centre.

In the long run you also need a few other areas for visitors around the lake. There you might need a parking place, a bird tower and a sign – explaining where they are and the idea with Zuvintas.

What intensity

I don't think this will be a problem for a long time, Don't worry about it. At least not yet.

How to regulate

See above – where. You decide where you can accept a lot of visitors (the information centre area) and where you prefer people to stay away.

How to evaluate allowable number of visitors

This is difficult. You can count visitors in the information centre and in the parking place. The technical solution is not a problem, but the money might be. Is it worth the money at Zuvintas at this moment? We don't think so. Make a rough estimation instead.

Functions of the administration building

Opening hours are very important. The information centre must be open during weekends. Not throughout the year, but certainly during the most important/interesting months. If you can't raise money for someone who will take care of the visitors – maybe you can move an office to the entrance.

You also need to shut down big spaces, make it less educational and more social.

Functions of administration

What specialist are needed to ensure these functions

You need someone who will take care of the visitors – no matter if it is a school, an ordinary family from Vilnius or a group of birdwatchers from Germany. It doesn't have to be someone with a proper education as biologist. On the contrary, you need someone who understands the lake as well as the visitors. Someone who will be responsible for marketing, press, website, trails, signs, the exhibition, school children etc. It's a full-time job!

If you can't raise the money for Zuvintas, maybe you can do it for several nature reserves in the region – or in the southern part of Lithuania. Make sure he or she will have the office in Zuvintas! At the entrance!

You need, basically, someone who is educated in marketing/communication and with a great interest in nature.

General outlines for Visitor Centres

An important task for conservation is to inform the public about nature. Especially protected areas.

Visitor Centres are centres for visitors in a nature area. The centre will describe, explain and make people understand the values in the area – and inspire people to spend time there. It's supposed to be a gateway into nature in general and Zuvintas in particular.

Indoors and outdoors

A Visitor Centre may be one or several buildings with information and activities – indoors and outdoors. About science, about experiences and about the history of man in the area.

A Visitor Centre can't stand alone. You also need signs, trails, guidance, activities, brochures, books and websites.

The Visitor Centre may cover a small area, a big area, a province, a county, a kind of habitat or some other sort of theme.

Purpose

The purpose of the Visitor Centre is to through exhibitions, activities and guidance...

- ▶ Increase the knowledge about a nature area – in biology, science cultural history and experiences.
- ▶ Explain what is happening in nature – and why.
- ▶ Guide the visitor about what to see, do and experience in the area – as well as how to do it and get there.
- ▶ Motivate the visitors to behave in a way which is acceptable to nature.
- ▶ Create an understanding for the value of maintaining nature areas in general and Zuvintas in particular.
- ▶ Stimulate the interest for nature, nature conservation and studies.
- ▶ Provide knowledge about the cultural history in the area.
- ▶ Spread knowledge about other nature reserves in the county.

Visitors

When it comes to the visitors - don't ever forget the large public. At all ages. Also focus on teachers and school-activities.

Questions to ask yourself

...if you are interested in building a new/better/other kind of Visitor Centre.

Where?

How many will come? If more? Or less? And who?

What will you tell them? And how?

How will the visitors move around? Where will they arrive?

*Design of the building? Identity? What will the building itself tell about you and your area?
Do we send the right signals? Are we and the building environmental friendly?*

Indoors? The exhibition? Content? Stories? Design? Size?

The costs? Who will pay? What can we afford? Now and in the long run?

How do you want it outside the building?

How can the local people participate?

Activities?

Opening hours?

Staff?

Entrance?

Outdoor exhibitions? Temporary exhibitions?

Broschures, information? Where and how?

Accessibility? What about small children? Old people? Disabled?

Sales? If yes, what and why?

*What do we want with everything? Write it down! Try it on a regular basis! If necessary -
rewrite.*