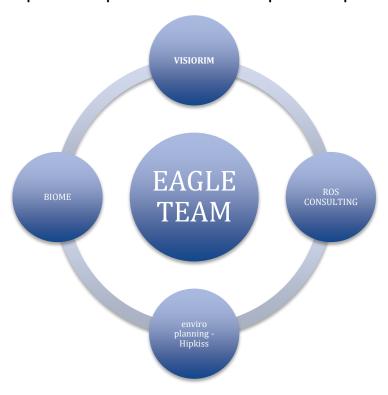


## Eagle team project overview



### **Eagle studies for wind farms and impacts on micro-siting**

4 experts team up to evaluate areas in scope for wind power.









#### No wind power without proper assessment!

Our team pools

- expertise
- competence
- experience

It's a high risk business to run wind farm development projects having too much coincidence involved. This counts especially when it comes to bird-life assement.



We operate a unique camera based predator bird monitoring helping achieving proof level for authority and court proceedings. - Cutting costs and risks.

Practice applied in continental Euorpe have arrived in Sweden.- and there is more to come. Earlier practice and ways of assesing eagles (Golden Eagle and white tailed Eagle) in Sweden are already obsolete. They are simply not sufficient anymore. This is confirmed by a significant number of wind turbine locations that have not been accepted by authorities.

As experts we are constantly updating on latest scientific status, we also exchange information across borders and we improve methods.

We concluded that the solution is to team-up and apply methods that are suitable for pointing out where wind turbines are acceptable to be located while costs for the wind power developer/asset owner are predictable.

We named our team simply the Eagle Team pointing out the focus of enterprise. Our is team works together since 2016. We successfully delivered reports since then.

Our team combines expertise and a variety of proven methods to a unique task force.

#### Our basic message and deliverable

We provide facts, rather than coincidence based conclusions in form of expert reports and advisory.

- Our team is bouncing this by employing three bird life experts, one data expert and a senior juridical expert from Sweden and Austria
- Swedish and EU perspective
- Various proven methods applied including standard circle density, heat-map, camera observation, and habitat suitability analysis
- We deliver expert reports combining expertise and methods.
- We communicate with all relevant stake holders including authorities

#### Our methods

- "Heat map" method based on rasterized data
- "Habitat suitability analysis" (HSA) index based (HSI)
- "Standard circle method" to compare areas and projects
- Camera observation long term camera observation operated from our office in India

#### Our core team

We collaborate as team and deliver expert reports

#### **Experts**

Ros Consulting and Development AB (Torbjörn Ros)
Biome Austria (Dr. Mag. Andreas Traxler)
VisiorIM
NaturalPower (Tim Hipkiss)
Birds
Birds/GIS
Data/ Manage
Birds

#### Camera observations and data capturing

IBVision remote services India (Jilu Raju)Camera

#### Our partners available on demand

Environmental Law & Development Centre (Dr. Christina Hörnberg)
Ökoenergie Projektentwicklung GmbH

#### **Background of experts**

#### 1. Visiorim AB

Robert Kalcik in charge has been working with data since 1994. As of 2003 Robert worked as analyst and head of Global Intelligence at ABN AMRO Bank N.V. responsible for information management, Business Intelligence along other tasks. As of 2008 Robert works independent consultant. In 2010 Robert developed the farm project Stor-Skälsjön including EIA. Robert



analysis senior

as an wind

experienced the Golden Eagle situation to be lacking clarity and started the camera observatory project in January 2016 with evaluating the Golden Eagle situation at Stor-Skälsjön with a remote-controlled camera system and with subject matter experts Dr.Mag. Traxler, Ros and Hipkiss. This project is still ongoing and delivering valuable data. Robert took on the task to coordinate the eagle surveys for the project Nordkölen in alignment with the mentioned experts and implementing the camera observation also in Nordkölen in beginning of 2020.

#### 2. Ros Consulting and Development AB

Torbjörn Ros is a biologist who in 1990 started the consulting company Pelagia Nature and

# Ros Consulting and Development AB

Environment AB with 20 employees. In 2015 he also started the company Ros Consulting and Development AB concentrating on wind farm projects and especially investigations on Golden eagle. He has a long experience of field investigations and inventories of Golden eagle and White-tailed eagle. In total he has been involved in more than 35 wind farm projects, from bird- and nature inventories to EIA and court proceedings (for the wind farm companies). For many years he was responsible for questions regarding birds in the forest landscape at Bird Life Sweden.



#### 3. Biome

The technical engineering and consulting office BIOME is working in the field of ornithology and wind-since 2005. Our expertise ranges from nature conservation, avian, vegetation and disturbance ecology, applied and basic research to environmental studies, research studies regarding nature conservation assessment for bats and birds and wind nature expertise and monitoring studies. Over the last



we put increased focus towards ornithology, collision studies and environmental assessment. BIOME became one of the largest offices in Austria for the investigation and research of birds and bats. Since 2015 we are also working as consultants for wind-energy projects in Sweden and were involved in the camera observatory project since the beginning of the project. Since 2020 our office has been contributing a large part of the data evaluation and interpretation in the project Nordkölen.

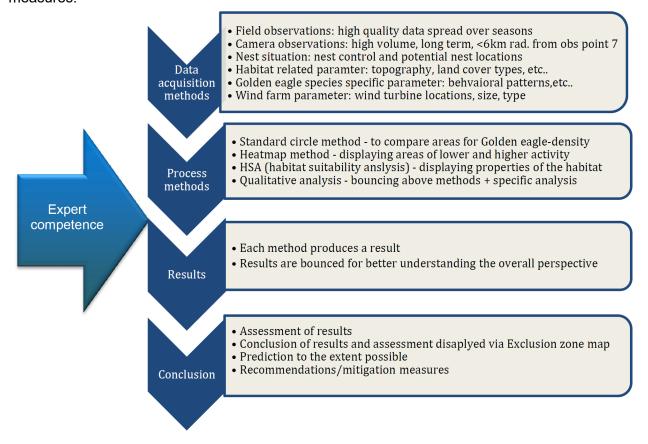
- 4. Natural Power Tim Hipkiss
- Tim Hipkiss is Principal Environmental Consultant at enviro planning.
- Tim is expert in evaluating risks for projects that affect environment including biodiversity.

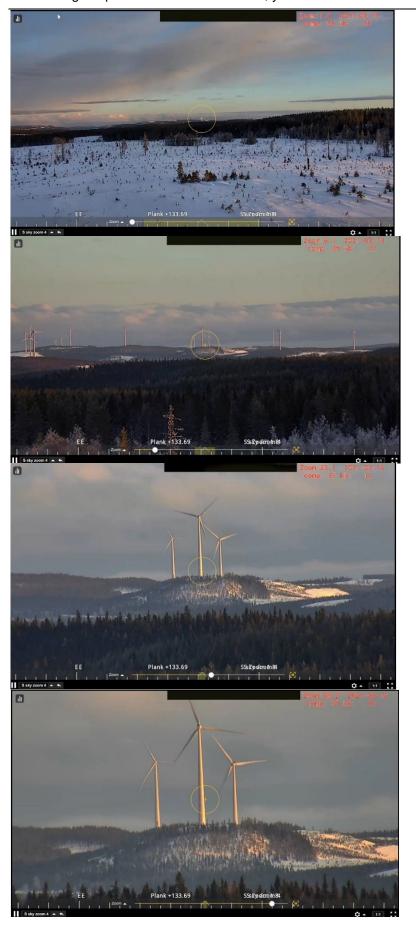


- Expert for minimizing impact on birds and other wildlife in wind farm projects
- PhD in animal ecology Umeå 2002, specialized in bird ecology among other fields.
- Long term expertise with previous engagement as research scientist for SLU in Umeå.
- Experienced in scientific research on Golden Eagles using GPS trackers in on-shore wind farm projects.
- Continued expert advisory work on eagles, especially concerning wind farm projects.

#### **Basic process**

Below diagram displays the basic process from source data to recommendations of mitigation measures.





Camera observation, no zoom

Camera observation, 6,7x optical zoom

Camera observation, 23,1x optical zoom

Camera observation, 39,2 x optical zoom



One of 4 masts with remote-controlled highend camera.