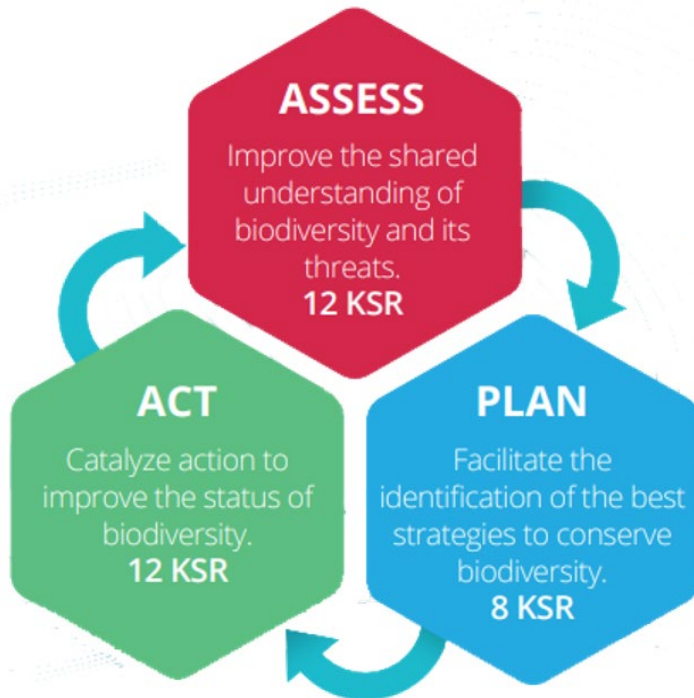


Conservation Planning for Hoverflies

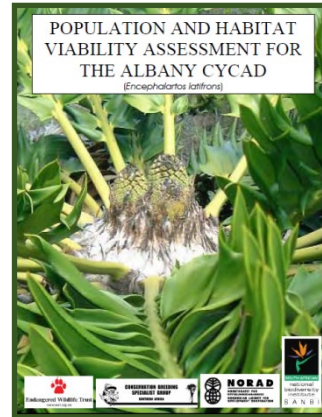
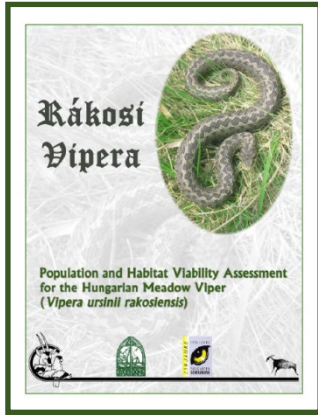


Ann-Katrine Garn
Copenhagen Zoo
IUCN_SSC CPSG Europe



CPSG is committed to **moving more threatened species, more quickly, from assessing, through conservation planning, and into effective action.**

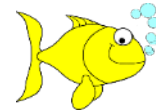
Moving from “single-species planning” ...



...to “multi-species planning”.

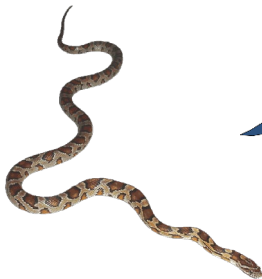


Site directed
action planning?

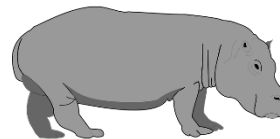


Habitat directed
action planning?

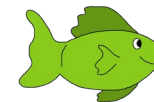
Threat directed
action planning?



Single
species
recovery
planning?



Ex situ
conservation
action
planning?





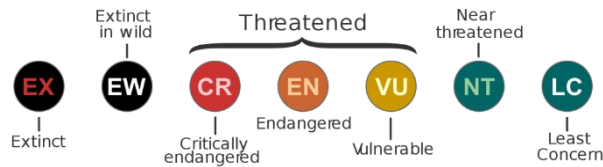
Geographic distribution



Habitat & Ecology



Conservation



Threats



Use & Trade



Population



Geographic distribution

(VU)

Status: Draft
 Region(s): Global
 Language: English
 Last Modified: 10 Jan 2019, 3:58 AM UTC+13 by Daniel Lumbantobing

← Previo Next →

All Fields View

- Distribution
- Occurrence
- Population
- Habitats and Ecology
- Use and Trade

Countries | LME | FAO

Countries of Occurrence

💡 When using Quick-Add, please ensure you also select the appropriate country-level for each subcountry unit.

Selections for Countries of Occurrence View/Edit Quick Add

	Presence	Origin	Seasonality
Indonesia	Extant	Native	Resident
Indonesia -> Kalimantan	Extant	Native	Resident

Sundaamio retianus (VU)

Status: Draft
 Region(s): Global
 Language: English
 Last Modified: 10 Jan 2019, 3:58 AM UTC+13 by Daniel Lumbantobing

← Previo Next →

All Fields View

- Distribution
- Occurrence
- Population
- Habitats and Ecology
- Use and Trade
- Threats
- Conservation
- Ecosystem Services
- Red List Assessment

Read Only mode | New | Save | Attachments | References | Summary | Tools | Manage Credits | Auto-Save Options

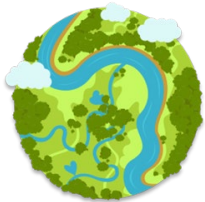
Geographic Range | AOO | EOO | Locations | Very restricted | Elevation/Depth | Map Status | Biogeographic Realms | Hotspot and UN MDG

Geographic Range Information


B | *I* | U | X₂ | X² | [List Icon] | [List Icon] | [Link Icon] | [Link Icon] | **T**

Background ▾

This miniaturized minnow is known from the peat swamps and blackwater streams of the southern part of Central Kalimantan, from the Kotawaringin to Kahayan basins, Indonesian Borneo (Conway *et al.* 2011) as well as from blackwater habitats of the Barito basin of southeastern Borneo (D. Lumbantobing pers. obs 2013). Its extent of occurrence (EOO) is estimated at 51,398 km² (based on total area within a minimum convex polygon around sites where the species has been recorded and where the potential habitat suitable for the species may be located), but the area occupied within this EOO (area of occupancy; AOO) is estimated to range around 1,000-19,135 km²; the upper limit of AOO based on a 2x2 km² grid overlay on the range map, while the upper limit based on the area of degraded peatland according to Giam *et al.* (2012). It is estimated that the species has possibly been experiencing continuing decline in AOO and EOO due to the fact that peat swamp forests in Southeast Asia have already been lost more than 60% by 2010 (Miettinen *et al.* 2012). Across the species range in southern Kalimantan, there are likely more than 10 patches of blackwater habitats, each of which appears to be affected relatively independently by the major threat to this species (habitat loss or degradation). Therefore, the population is likely to occur in more than 10 locations.



Habitat information



Claudine Gibson

IUCN SSC Freshwater Fish Specialist Group

Parakysis longirostris (DD)
(Singapore Little Warty Catfish)

Status: Draft
Region(s): Global
Language: English
Last Modified: 24 May 2019, 3:48 AM
Modified: UTC+12 by Amy Palmer-Newton

Working Sets

Subscribed Working Sets

- Eels_for_2015.4_Red_List via Caroline Pollock
- Freshwater_Fishes_Sundaic_1_All via Catherine Sayer
- Freshwater_Fishes_Sundaic_1_Workshop_A_Tim Lyons via Catherine Sayer
- Freshwater_Fishes_Sundaic_1_Workshop_B_Catherine Sayer via Catherine Sayer
- Freshwater_Fishes_Sundaic_1_Workshop_C_Claudine Gibson via Catherine Sayer

Read Only Mode | New | Save | Attachments (0) | References | Criteria Calculator

Calculated Category & Criteria: DD

Documentation | **Coded Habitats** | Hab. Decline/ESH | Land Cover | Life History | Movement Patterns | Systems

IUCN Habitats Classification Scheme

Selections for General Habitat Information

	Season	Suitability	Major Importance?
5.1. Wetlands (inland) -> Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	Resident	Suitable	Yes
5.4. Wetlands (inland) -> Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	Resident	Suitable	Yes

Taxon List

- Parakysis anomalopteryx
- Parakysis grandis
- Parakysis hystriculus
- Parakysis longirostris
- Parakysis notialis
- Parakysis verrucosus

Assessments

Draft Assessments (1)

New General Habitat Information

Select:

- 3.5. Shrubland -> Shrubland - Subtropical/Tropical Dry
- 3.6. Shrubland -> Shrubland - Subtropical/Tropical Moist
- 3.7. Shrubland -> Shrubland - Subtropical/Tropical High Altitude
- 3.8. Shrubland -> Shrubland - Mediterranean-type Shrubby Vegetation
- 4.1. Grassland -> Grassland - Tundra
- 4.2. Grassland -> Grassland - Subarctic
- 4.3. Grassland -> Grassland - Subantarctic
- 4.4. Grassland -> Grassland - Temperate
- 4.5. Grassland -> Grassland - Subtropical/Tropical Dry
- 4.6. Grassland -> Grassland - Subtropical/Tropical Seasonally Wet/Flooded
- 4.7. Grassland -> Grassland - Subtropical/Tropical High Altitude
- 5.1. Wetlands (inland) -> Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)
- 5.2. Wetlands (inland) -> Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks
- 5.3. Wetlands (inland) -> Wetlands (inland) - Shrub Dominated Wetlands
- 5.4. Wetlands (inland) -> Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands
- 5.5. Wetlands (inland) -> Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)

Save Selection | Cancel


HABITAT, THREATS & CONSERVATION MATRIX: NEGROS - PANAY FAUNA					
1. Forest	1.6 Subtropical / tropical moist lowland	Suitable	X	X	X
	1.9 Subtropical / tropical moist montane	Suitable	X	X	X
3. Shrubland	3.6 Subtropical / tropical Moist	Suitable		X	
4. Grassland	4.5. Subtropical / tropical dry	Marginal			X
	4.6 Subtropical / tropical seasonally wet / flooded	Marginal	X	X	
	4.7 Subtropical / tropical high altitude	Marginal	X		
14. Artificial / Terrestrial	14.6. Subtropical / tropical heavily degraded former forest	Marginal	X		



Red List category and treats

Species templates - cgibson.nz x Species Lists - Google Drive x Freshwater_Fishes_Sundaic_1_W x Freshwater_Fishes_Sundaic_1_W x IUCN Species Information Service x

https://sis.iucn.org/apps/org.iucn.sis.server/SIS/index.html#W91088713T91075781A91075788



Claudine Gibson
IUCN SSC Freshwater Fish Specialist Group

Working Sets

- Freshwater_Fishes_Sundaic_1_All via Catherine Sayer
- Freshwater_Fishes_Sundaic_1_Workshop_A_Tim Lyons via Catt
- Freshwater_Fishes_Sundaic_1_Workshop_B_Catherine Sayer v
- Freshwater_Fishes_Sundaic_1_Workshop_C_Claudine Gibson v
- Freshwater_Fishes_Sundaic_1_Workshop_D_Amy Palmer-Newt
- Freshwater_Fishes_Sundaic_1_Workshop_E_Clay Meredith via

Taxon List

- Sundadanio gargula
- Sundadanio goblinus
- Sundadanio margariton
- Sundadanio retiarus
- Sundadanio rubellus
- Systemus rubripinnis

Assessments

Draft Assessments (1)

2019-01-28 --- Global

Sundadanio retiarus (VU)

Status: Draft
 Region(s): Global
 Language: English
 Last: 10 Jan 2019, 3:58 AM
 Modified: UTC+13 by Daniel Lumbantobing

← Previo Next →

All Fields View

- Distribution
- Occurrence
- Population
- Habitats and Ecology
- Use and Trade
- Threats**
- Conservation
- Ecosystem Services
- Red List Assessment
- Text Accounts

Documentation **Coded Threats**

Threats Classification Scheme

No past, ongoing, or future threats exist to this species. The threats to this species are unknown.

Selections for Threats View/Edit Quick Add

	Timing	Scope	Severity	Impact Score	No. of Stresses
2.1.3. Agriculture & aquaculture -> Annual & perennial non-timber crops -> Agro-industry farming	Ongoing	Majority (50-90%)	Rapid Declines	Medium Impact: 7	4
5.4.1. Biological resource use -> Fishing & harvesting aquatic resources -> Intentional use: (subsistence/small scale) [harvest]	Ongoing	Unknown	Slow, Significant Declines	Unknown	3
7.2.3. Natural system modifications -> Dams & water management/use -> Abstraction of surface water (agricultural use)	Ongoing	Majority (50-90%)	Very Rapid Declines	High Impact: 8	4



IUCN Conservation Actions

IUCN Species Information Service | Inbox (7) - cgibson.nz@gmail.com

https://sis.iucn.org/apps/org.iucn.sis.server/SIS/index.html#W91088713T2782A90332155

SIS
Claudine Gibson
IUCN SSC Freshwater Fish Specialist Group

Betta macrostoma (EN)
(Brunei Beauty)

Status: Draft
Region(s): Global
Language: English
Last Modified: 12 Dec 2016, 2:48 PM UTC+13 by The Administrator

Working Sets: Freshwater_Fishes_Sundaic_1_All via Catherine Sayer, Indo-Burma_freshwater_fishes_all via David Allen, New_Zealand_FW_Plants via Caroline Pollock, PUBLISHED_2013.1_New_Zealand_FW_Odonata via Caroline Pollock, PUBLISHED_2013.2_Invertebrates_Molluscs_FW_New_Zealand via Caroline Pollock, PUBLISHED_2014.3_New_Zealand_FW_Fishes via Caroline Pollock

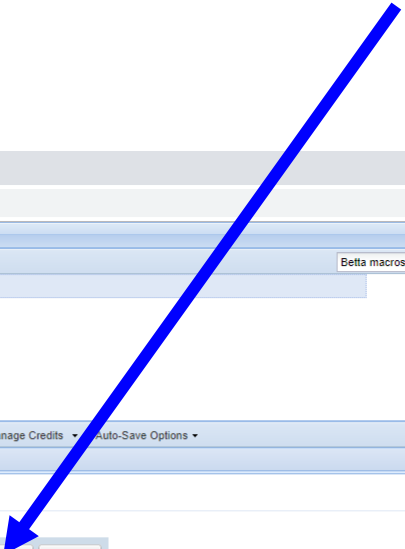
Taxon List: Beta macrostoma

Conservation Needed

Important Conservation Actions Needed

Selections for Important Conservation Actions Needed

	View/Edit	Quick Add
1.1. Land/water protection -> Site/area protection		
1.2. Land/water protection -> Resource & habitat protection		
2.1. Land/water management -> Site/area management		
3.1.1. Species management -> Species management -> Harvest management		
3.1.2. Species management -> Species management -> Trade management		
3.4.1. Species management -> Ex-situ conservation -> Captive breeding/artificial propagation		
4.3. Education & awareness -> Awareness & communications		
5.1.2. Law & policy -> Legislation -> National level		
5.1.3. Law & policy -> Legislation -> Sub-national level		
5.2. Law & policy -> Policies and regulations		
5.4.2. Law & policy -> Compliance and enforcement -> National level		
5.4.3. Law & policy -> Compliance and enforcement -> Sub-national level		



+ Add Important Conservation Actions Needed

Only selections with a check icon will be saved.

WARNING: Items CANNOT be removed by deselecting them.

- ▶ 1. Land/water protection (2)
 - 1.1. Site/area protection
 - 1.2. Resource & habitat protection
- ▶ 2. Land/water management (3)
 - 2.1. Site/area management
 - 2.2. Invasive/problematic species control
 - 2.3. Habitat & natural process restoration
- ▶ 3. Species management (4)
 - ▶ 3.1. Species management (3)
 - 3.1.1. Harvest management
 - 3.1.2. Trade management
 - 3.1.3. Limiting population growth
 - 3.2. Species recovery
 - ▶ 3.3. Species re-introduction (2)
 - 3.3.1. Reintroduction
 - 3.3.2. Benign introduction
 - ▶ 3.4. Ex-situ conservation (2)
 - 3.4.1. Captive breeding/artificial propagation
 - 3.4.2. Genome resource bank
- ▶ 4. Education & awareness (3)
 - 4.1. Formal education
 - 4.2. Training
 - 4.3. Awareness & communications
- ▶ 5. Law & policy (4)
 - ▶ 5.1. Legislation (4)
 - 5.1.1. Legislation
 - 5.1.2. Policies and regulations
 - 5.1.3. Private sector standards & codes
 - 5.1.4. Compliance and enforcement (4)
 - ▶ 5.2. Policies and regulations
 - ▶ 5.3. Private sector standards & codes
 - ▶ 5.4. Compliance and enforcement (4)
- ▶ 6. Livelihood, economic & other incentives (5)
 - 6.1. Linked enterprises & livelihood alternatives
 - 6.2. Substitution
 - 6.3. Market forces
 - 6.4. Conservation payments
 - 6.5. Non-monetary values

Conservation Action Planning Bundles

Common threats linked to that area
(e.g. development projects)



Common threats linked to that habitat
(e.g. wetlands)



Common threats linked to species
(e.g. trade, amphibian chytrid fungus)

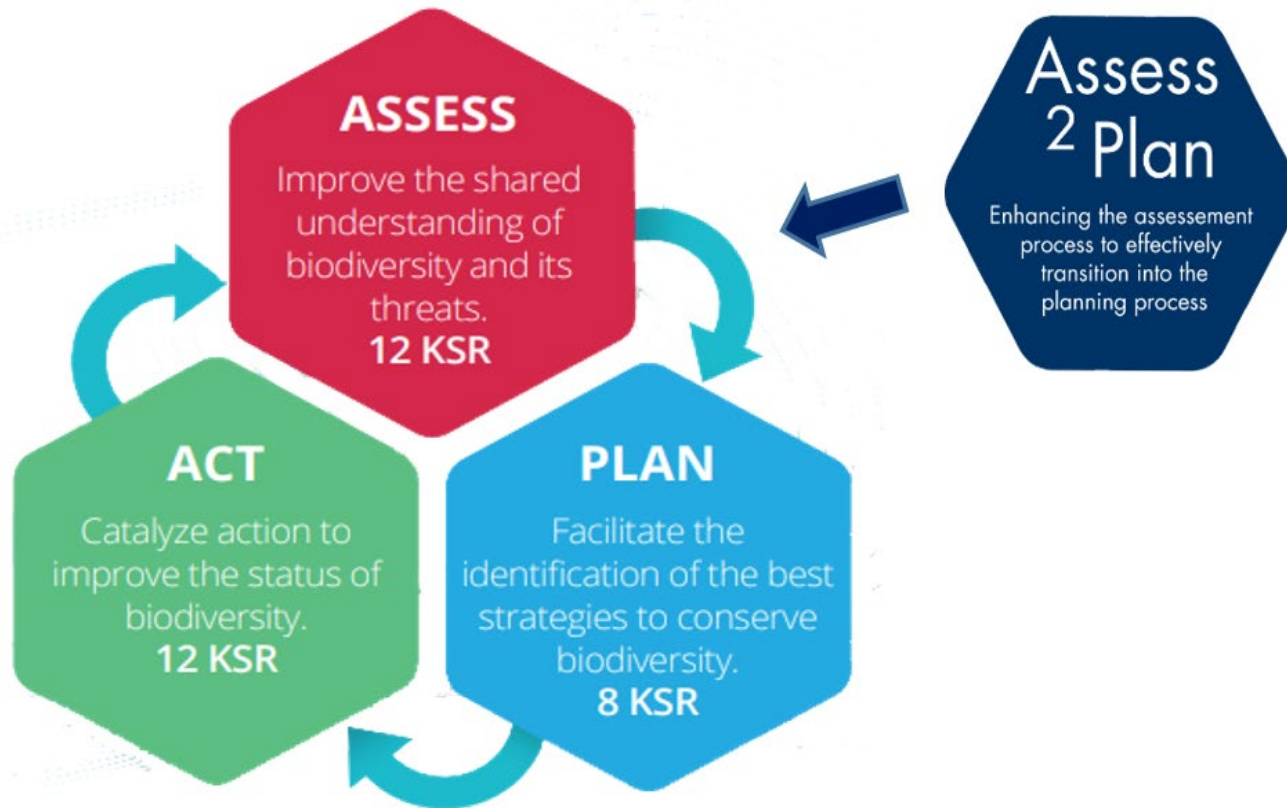


Outlier species whose needs do not
overlap much with other species, etc.

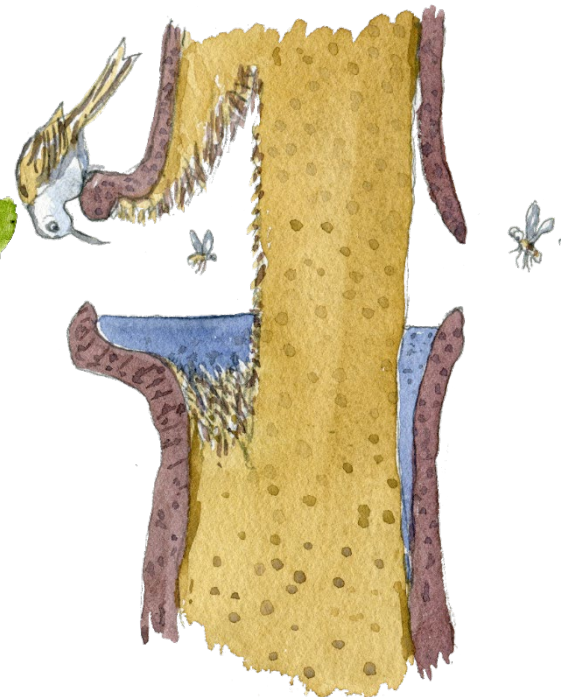
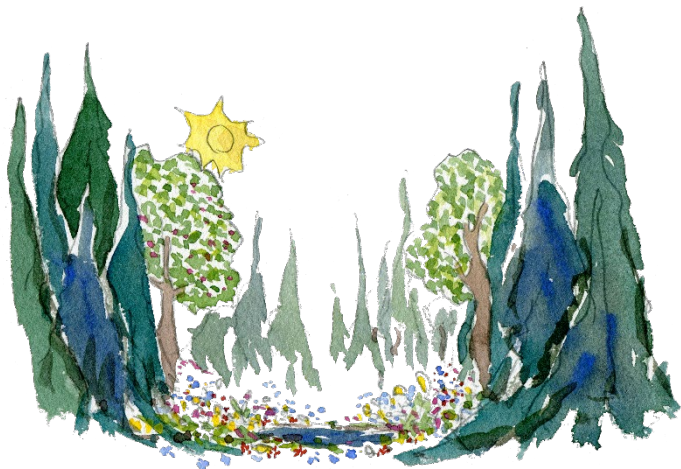
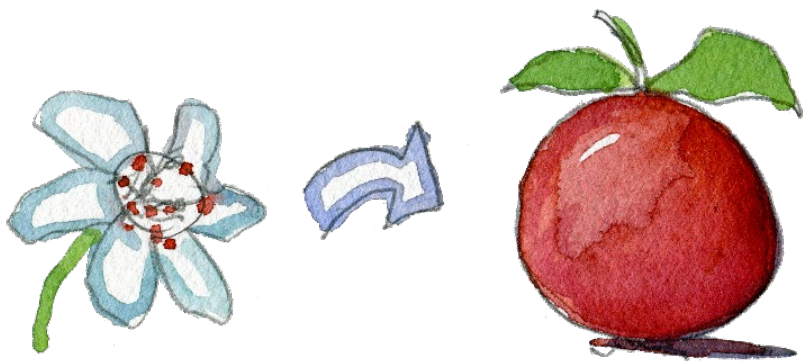


Other 'buckets' alone not
sufficient– require care at level of
individuals/populations













The identified goals for hoverfly conservation in Denmark

- GOAL 1** Old and veteran trees, and their features, are valued and protected.
- GOAL 2** Forest management supports hoverflies.
- GOAL 3** There is a diverse herb layer in open areas as well as forests — and ecotones between them.
- GOAL 4** Dune systems are dynamic and biodiverse.
- GOAL 5** Natural hydrology is protected or restored — especially small water bodies and water-saturated ground.
- GOAL 6** Pesticide use is rare and carefully targeted.
- GOAL 7** Any commercial beekeeping practices in Denmark are compatible with hoverfly conservation efforts.
- GOAL 8** There are sufficient tools, data, databases and experts for effective hoverfly monitoring and conservation in Denmark.
- GOAL 9** Relevant sectors of society know what hoverflies are and are aware of their ecological value, conservation needs, and what they can do to help conserve them.



MOVING FROM ASSESSMENT TO CONSERVATION PLANNING FOR HOVERFLIES IN DENMARK



European hoverflies: moving from assessment to conservation planning



Strategi for Forvaltning af Truede og Rødlistede Arter 2023

Som et led i arbejdet med strategien har Miljøstyrelsen i samarbejde med IUCN Conservation Planning Specialist Group (CPSG) Europe afprøvet CPSG-konceptet Assess to Plan (A2P), til brug for planlægning af forvaltning af hele grupper af truede arter. Konceptet tager udgangspunkt i at samle eksisterende data og viden om arternes biologi, udbredelse, krav til levesteder, præfaktorer, overvågningsdata, rødlistevurderinger samt naturforvaltning i relation til arterne. På den baggrund prioriteres hvilke tiltag, der bør bruges for at skabe bedre forhold for arterne. Konceptet fortsætter, at arbejdet sker i samarbejde med lokale biologiske eksperter, repræsentanter for relevante myndigheder og interessentgrupper som for eksempel lodsejere.

Projektet blev gennemført med fokus på danske svirrefluer, som repræsenterer en stor del af de vilde bestøvere i Danmark. Der findes ca. 300 arter af svirrefluer i Danmark, hvoraf 55 er rødlistede. Projektet blev gennemført som et pilotprojekt, hvor der ikke skulle tages hensyn til ressourcer eller ansvar for efterfølgende gennemførelse af indsatser.

Projektet bekræftede, at der opstår stor synergi, når man samler mange forskellige eksperter og interessenter om et fælles emne. Projektet viste, at det generelt er de samme præfaktorer og de samme vilmålinger, som har stor betydning for stort set hele artsgruppen – og med stor sandsynlighed for mange andre arter af vilde bestøvere. Det drejer sig primært om omfang og kvalitet af levesteder og mikrohabitatler. Særligt lysåbne arealer med mange blomster i nærheden af veterantræer, dødt ved og vandhuller har stor betydning. Svirrefluer er generelt nyttedyr, som ud over at bidrage til bestøvning i mange tilfælde også har larver, som for eksempel spiser blæddus og roddus. En stor del af svirrefluerne larver lever i tilknytning til veterantræer og dødt ved, eller i vilde biotoper.

Som led i projektet blev der set på en del af de eksisterende forvaltningsredskaber og på, om de virker hensigtsmæssige i forhold til at skabe bedre vilkår for svirrefluer. Et vigtigt redskab til at skabe lysåbne natur med mange blomster er ekstensiv græsning, som samtidig bidrager med afføring, der også er vigtig for mange insekter og deres larver. Beskyttelse af veterantræer i skovene og det åbne landskab er ligeledes et vigtigt redskab.

Thank you!



Ann-Katrine Garn
akg@zoo.dk