

## Report

### D1

# After project monitoring of target herptiles in the Danish project sites

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## Summary

This report summarizes results of the final (2021) monitoring of amphibians at 15 Danish project sites under the LIFE project SemiAquaticLife – “Recreating habitat complexity for semi-aquatic fauna” (LIFE14 NAT/SE/000201). The project aims to restore and improve the conservation status of amphibians, *Lacerta agilis* and semi-aquatic insects in Natura-2000 areas in southern Sweden (11), Denmark (18) and Germany (9). The goal is to ensure viable metapopulations of the species listed in Annexes II and IV of the EU Habitats Directive.

The objective of the final monitoring was to assess the status of the target species after implementation of the conservation actions. The target species were: *Triturus cristatus*, *Bombina bombina*, *Pelobates fuscus*, *Hyla arborea*, *Epidalea calamita*, *Bufotes viridis*, *Rana arvalis*, *Rana dalmatina*.

The results of the monitoring are summarized in the Table 1.

Monitoring of amphibians was carried out on all sites where actions for amphibians had been implemented. Thus, excluding the sites DK108, DK116 and DK186. Only ponds which were dug or restored during the project were monitored to be able to assess an immediate impact of the project.

In DK-186 *T. cristatus* is designated for the Natura2000 site and will also surely benefit from digging and restoring of ponds since there is a great lack of fish-free waters with a good water quality. A few adults have been found in the lakes but no larvae. *H. arborea* occurs on Bornholm but not within the forest and thus will not benefit from the new waters. *Rana dalmatina* is found breeding in several lakes in the forest and will also for sure benefit from the new and restored ponds. The actions were carried out so late that no colonization of *T. cristatus* could be monitored.

In Jutland on all sites (DK84, DK92, DK94, DK95, DK97, DK104) the digging and restoration of ponds resulted in colonisation of target species: *R. arvalis*, *T. cristatus* and *H. arborea*.

Especially colonisation of the restored ponds in forests of DK92, DK94 and DK104 has been a great success and the project will serve to support the amphibian populations greatly in the coming years.

In DK84 and DK97 the soil is sandy and colonisation of plants and thus most amphibian species will take some years longer than in the forests.

On DK125 *B. bombina* colonised three out of four restored ponds but none of the new dug underlining the extra time needed for development of the new ponds to fulfil the habitat requirements of *B. bombina*.

On DK143 no sign has been recorded yet of the reintroduced *E. calamita* but *B. viridis* has colonised one of the new ponds.

On the sites DK154, DK162, DK163, DK168, DK169 and DK235 the colonisation of ponds has so far shown to be considerably less than expected. But nevertheless, some colonisation of ponds by *B. viridis*, *H. arborea* and *T. cristatus* have been recorded. It is expected to see a much larger colonisation in the coming years.

## Overview of all sites

In 2021 D1. monitoring has taken place in 15 Danish project sites out of 18. The monitoring is focused on the target species of the project, thus not all species have been thoroughly registered

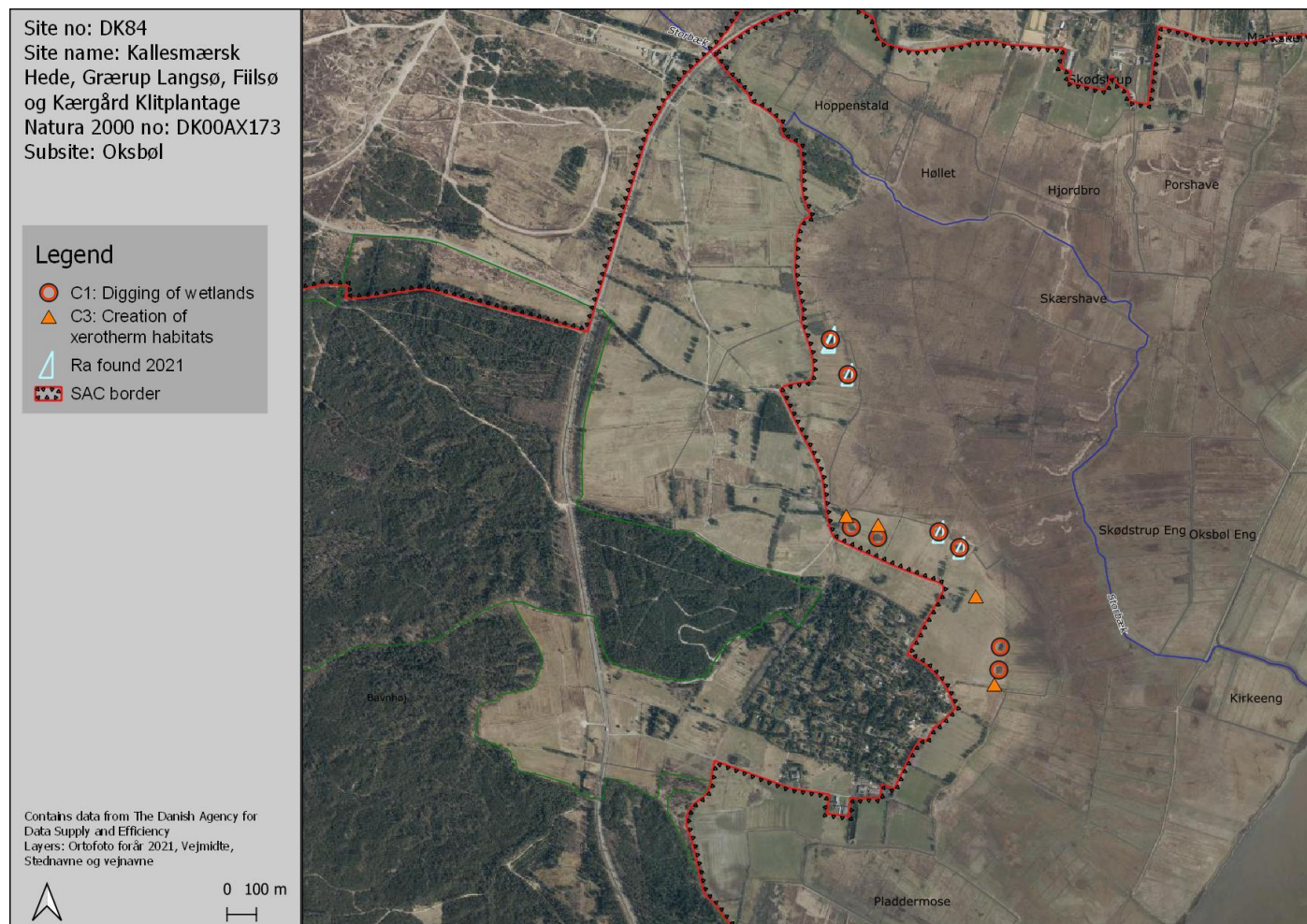
DK no.	Site name	Ponds monitored 2021	Triturus cristatus		Bombina orientalis		Pelodytes fuscus		Hyla arborea		Epidalea calamita		Bufo variabilis		Rana dalmatina		Rana lessonae		C7. Species reintroduction	C1/C2/C3
			Breeding ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males	Number of ponds	Calling males		
DK84	Oksbøl, Kallemærsk Hede	8															75	4		8 / 0 / 4
DK92	Pamhule Skov, Stevning Dam	19	5					11	7											4 / 15 / 0
DK94	Rinkenæs Skov, Dyrehaven og Rode Skov	28	8																	5 / 26 / 0
DK95	Hostrup Sø	9	5					8	1								28	8		5 / 4 / 5
DK97	Frøslev Mose	11																		21 / 1 / 0
DK104	Lilleskov, Troldsmose	5	2					4	2											2 / 3 / 0
DK125	Avernakø	3		11	2															3 / 4 / 0
DK142	Saltholm	8										15	2							0 / 0 / 0
DK143	Vestmager	22										2	1						Ec	22 / 14 / 8
DK154	Stold Skydeterræn	5																		2 / 3 / 3
DK162	Agersø, Stigsnaes, Glænø, Omø	26	6	39	3										19	1	2	1	Bb, Bv, Ec	8 / 21 / 5
DK163	Holmegaards Mose, Tystrup-Bavelse	9	4					43	3						178	4			Ha	8 / 5 / 3
DK168	Vestmøn	31	6					270	9						575	5			Ec, Ha	14 / 13 / 0
DK169	Enø, Gavnbø, Svinø, Knudshoved Odde	23	3									29	4						Bb, Bv, Ec	13 / 8 / 9
DK235	Jægerspris Skydeterræn	19	5														5	3		12 / 10 / 11

Table 1. Result of D1: monitoring of amphibians 2021. **Red cells**: target species not found, **green cells**: target species found, **blue cells**: non-target species found. Number of calling males refer only to D1 monitoring 2021. Number of ponds refer only to ponds with C1/C2 and/or C7 but includes additional species records from arter.dk in 2021.



## DK84 Oksbøl Kallesmærsk Hede

Sandy area with dunes, dry and wet heath. 4 ponds with *R. arvalis*. *E. calamita* is present within the N2000 site, but not found in and around the new ponds.



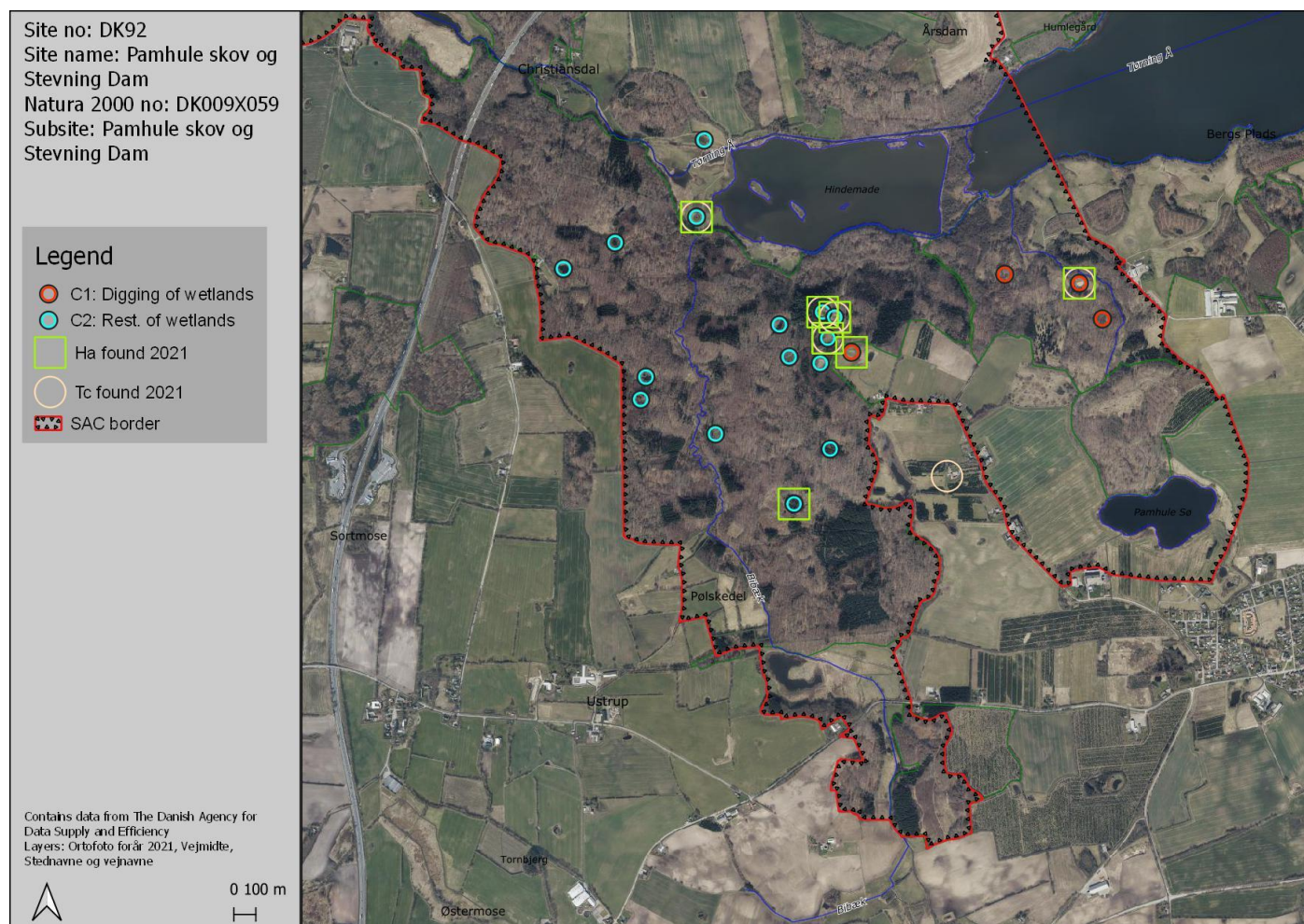
One of the new ponds with *Rana arvalis*



## DK92 Pamhule Skov, Stevning Dam

*T. cristatus* and *H. arborea* are target species and both were at the beginning of the project found breeding in a small pond on the meadow at Hindemade, north of the forest. The two species presumably live in small populations on the site since there were only few suitable breeding ponds for amphibians. The function of the ponds was diminished by overshadowing, dead leaves from trees and in some cases occurrence of fish. There is a big potential for both species on the site.

In 2021 *H. arborea* was heard calling from five of the restored ponds and larvae of *T. cristatus* were found in four of the restored ponds. It was possible to remove enough trees around the restored forest ponds so that they now are situated well sun exposed. The new and restored ponds will for sure give the two species a large boost on the site in the coming years.







*Restored breeding ponds for H. arborea and T. cristatus.*



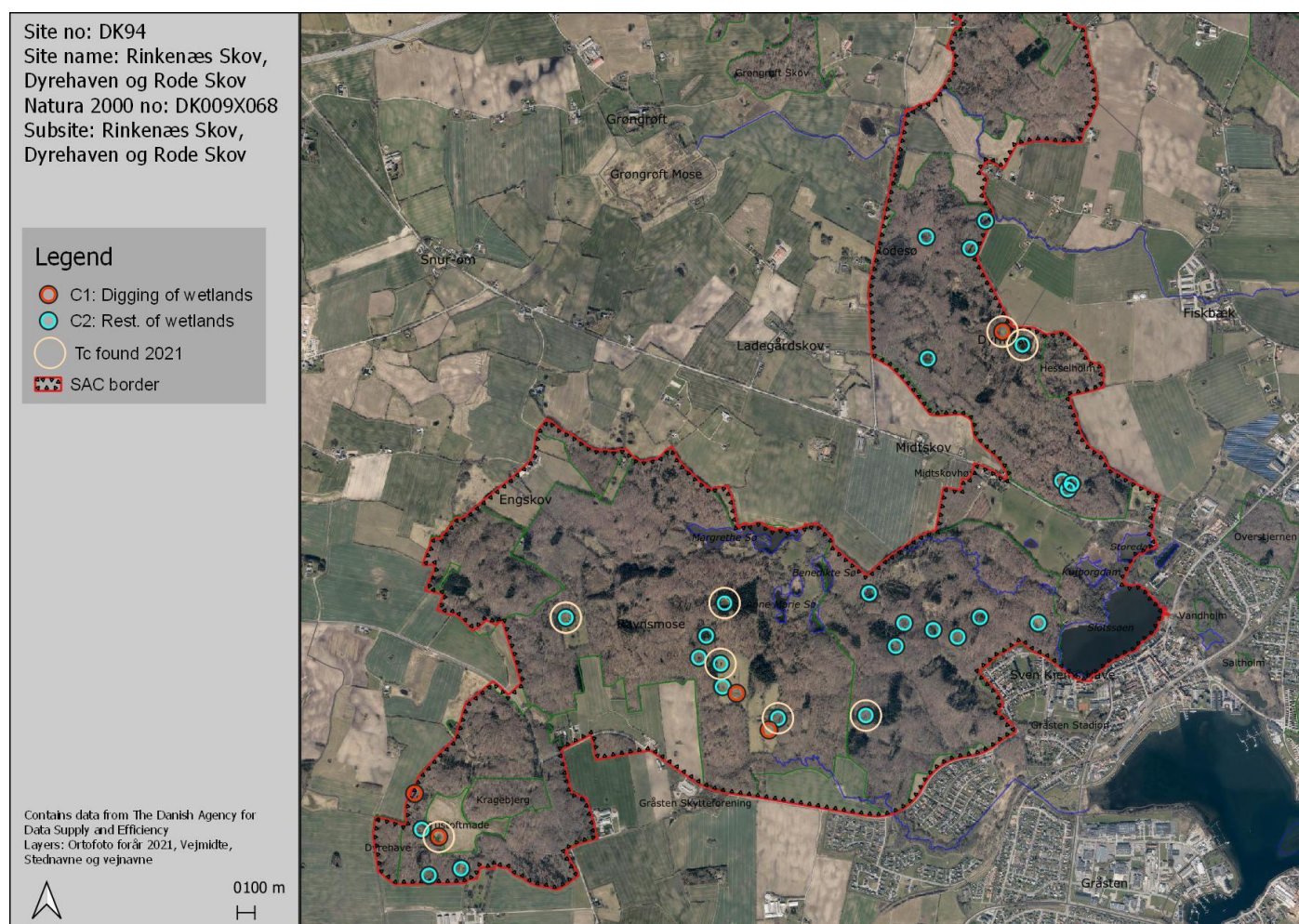
*Larvae of T. cristatus, triturus vulgaris and dragon fly sp. in restored pond.*



## DK94 Rinkenæs Skov, Dyrehaven og Rode Skov

*T. cristatus* is the only amphibian being targeted by the project in the forests at the site. There is a great potential for *T. cristatus* in the deciduous forest but the population at the beginning of the project was rather small due to a great lack of suitable breeding ponds. Only a few ponds were un-eutrophic and sufficiently sun exposed to serve as breeding sites. The ponds in the forest were almost all heavily overshadowed and with a quite low water level due to a massive downfall of dead leaves.

At the final monitoring *T. cristatus* was found breeding in 8 of the new and restored ponds. More ponds will for sure be colonized in the coming years when the submersed vegetation develops and a much stronger population of *T. cristatus* will be the result.



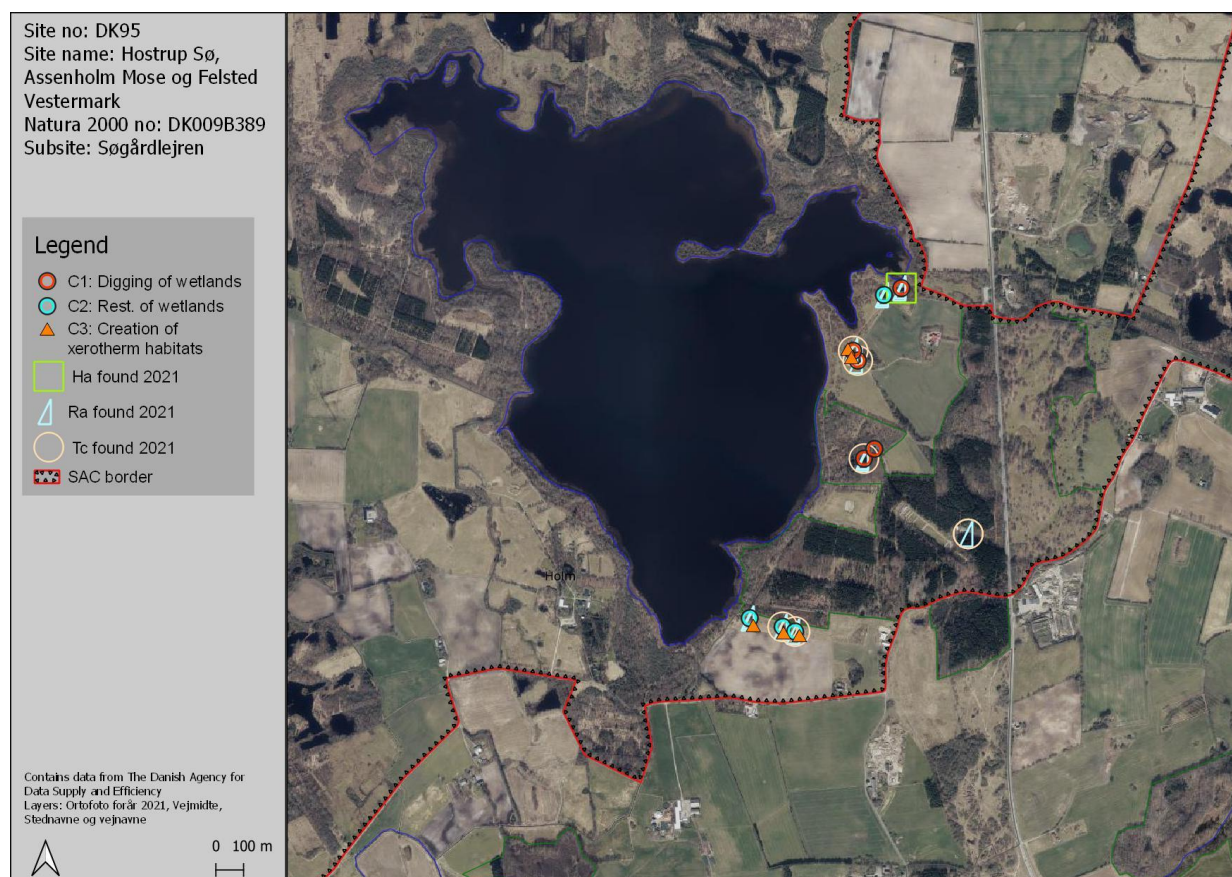




Restored and enlarged ponds now functioning as breeding sites of *T. cristatus*.

## DK95 Hostrup Sø

*T. cristatus*, *P. fuscus* and *R. arvalis* are target species and all occur in the area. The N2000 area is designated for *T. cristatus*. *P. fuscus* occur only in lakes in the southern part of the area and the stock is considered to be very vulnerable. *Triturus cristatus* and *Rana arvalis* occur in most lakes in the project area. However, there is generally a shortage of suitable breeding ponds in the southern and eastern part of the area.







Pond with *P. fuscus* and *T. cristatus*

## DK97 Frøslev Mose

*R. arvalis* occurs in the moor and *P. fuscus* occurs in a strong population just at the German side of the border. *R. arvalis* is a secondary target species benefitting from the new waters dug for *Leucorrhinia pectoralis*. The population of *R. arvalis* has a brilliant habitat in the moor but on the Danish side it was strongly limited by a lack of suitable breeding ponds. In 2021 *R. arvalis* was found breeding in three of the new ponds in the moor and when the other new ponds become more vegetated the population has a very good chance of increasing substantially. *P. fuscus* has a good chance of colonizing the new ponds since the westernmost pond is situated only 800 m from the German breeding ponds of *P. fuscus* and the population is quite strong.



Site no: DK97  
Site name: Frøslev Mose  
Natura 2000 no: DK009X070  
Subsite: Frøslev Mose

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- △ Ra found 2021
- ⬢ SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmide,  
Stednavne og vejnavne



0 100 m



*New shallow pond in the moor and eggcluster of Rana arvalis.*



## DK104 Lilleskov, Trolsmose

Both *T. cristatus* and *H. arborea* are target species of the site. At the beginning of the project the two species were found breeding only outside the forest in a single pond on a grazed meadow. The ponds in the forest were too nutritious and overgrown to function as breeding sites. Two ponds have been dug within the forest during the project and in 2021 both were colonized by both species. Thus, the situation of the two amphibian species has improved a lot.



New pond in the forest and larvae of *T. cristatus*.



## DK125 Avernakø

Both *B. bombina* and *T. cristatus* are designated for the site but only *B. bombina* is a target species in the project. *B. bombina* lives on both Avernakø and Korshavn being the two islands adjoined by a dam and together referred to as Avernakø. On Avernakø *B. bombina* almost exclusively lives within the Natura2000 site on the island where fields have been converted into permanent grass lands with ponds and grazing robust cattle. On Korshavn the population lives in ponds scattered over the island and most of these are situated outside the small Natura2000 site on the eastern edge of the island. On Avernakø the population has seemed to be stable in the last years possibly having reached a carrying capacity based on the area of suitable pond habitat. The population on Korshavn is much smaller because the number of suitable ponds on the island is small due to overgrowth and eutrophication.

On Avernakø the project has converted two farmed fields into permanent grassland and dug new ponds in the new semi-nature. For *B. bombina* a well-developed vegetation is crucial to give the frog shelter against predators. Thus, it will take some years before the pristine new dug ponds dug in clay will be colonized by *B. bombina*. Also, an old pond was restored and enlarged and in this pond the vegetation was so developed in 2021 that four males of *B. bombina* were calling.

On Korshavn three ponds have been restored and in two of these seven calling males were heard. The restored ponds become colonized much faster than new ponds due to the seed bank at roots in the old sediment.

On both islands the new and restored habitats will allow the populations to grow to a higher level.

*T. cristatus* occurs in a small population on both islands due to the lack of forest and dead wood. The newt is a predator on eggs and tadpoles of *B. bombina* and therefore *B. bombina* do not coexist well with *T. cristatus* if the latter occurs in a large density.





Site no: DK125  
Site name: Sydfynske Øhav  
Natura 2000 no: DK008X201  
Subsite: Avernakø (SAC111)

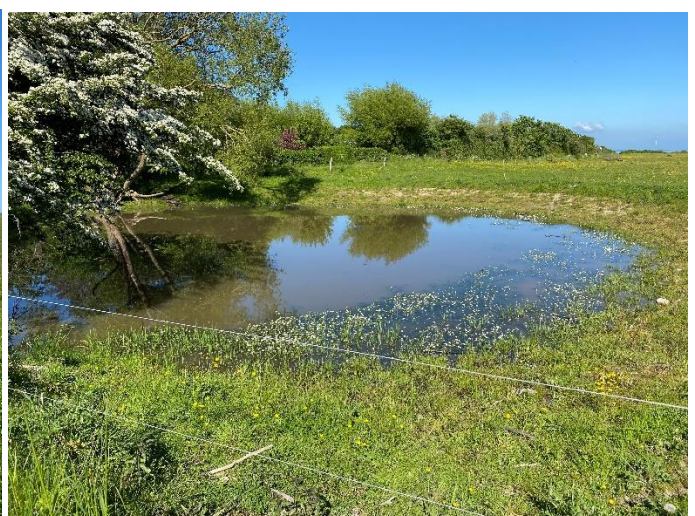
#### Legend

- C2: Rest. of wetlands
- △ Bb found 2021
- + Ec found 2021
- ⬢ SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmilitte,  
Stednavne og vejnavne



0 100 m



*A new and a restored pond both situated in grassland.*

## DK142 Saltholm

There were no conservation actions implemented on Saltholm. The target species is *B. viridis*. The population of the green toad is very small, considering the very large area of the beach meadow on Saltholm. In 2017, 40 males of the toad were seen in two water holes, in 2021 15. The spring in 2021 was very cold and very dry in April and very wet in May. Also, a year before, in 2020 was very dry. It is possible that cold weather was a reason why the amount of the toads was lower than in 2017 during registration. There are countless spring-flooded depressions and smaller water holes in the central part of Saltholm (Brækket), but they are very dependent on the precipitation and therefore usually only few of them have a sufficient water depth and water quality to make possible successful breeding of the toad. Survival is quite poor in the first period of the animals' lives, but the individuals who learn to survive probably survive reasonably long. There is several km from the best breeding water holes in Brækket to rocky habitats with hides near Holmegaarden.

*B. viridis* lives in a metapopulation in the region (species can migrate over a sea), also other sites included into the SEMIAQUATIC: DK-143 Vestamager and Falsterbo (SWE 5,6,7)



DK-142 and DK-143.

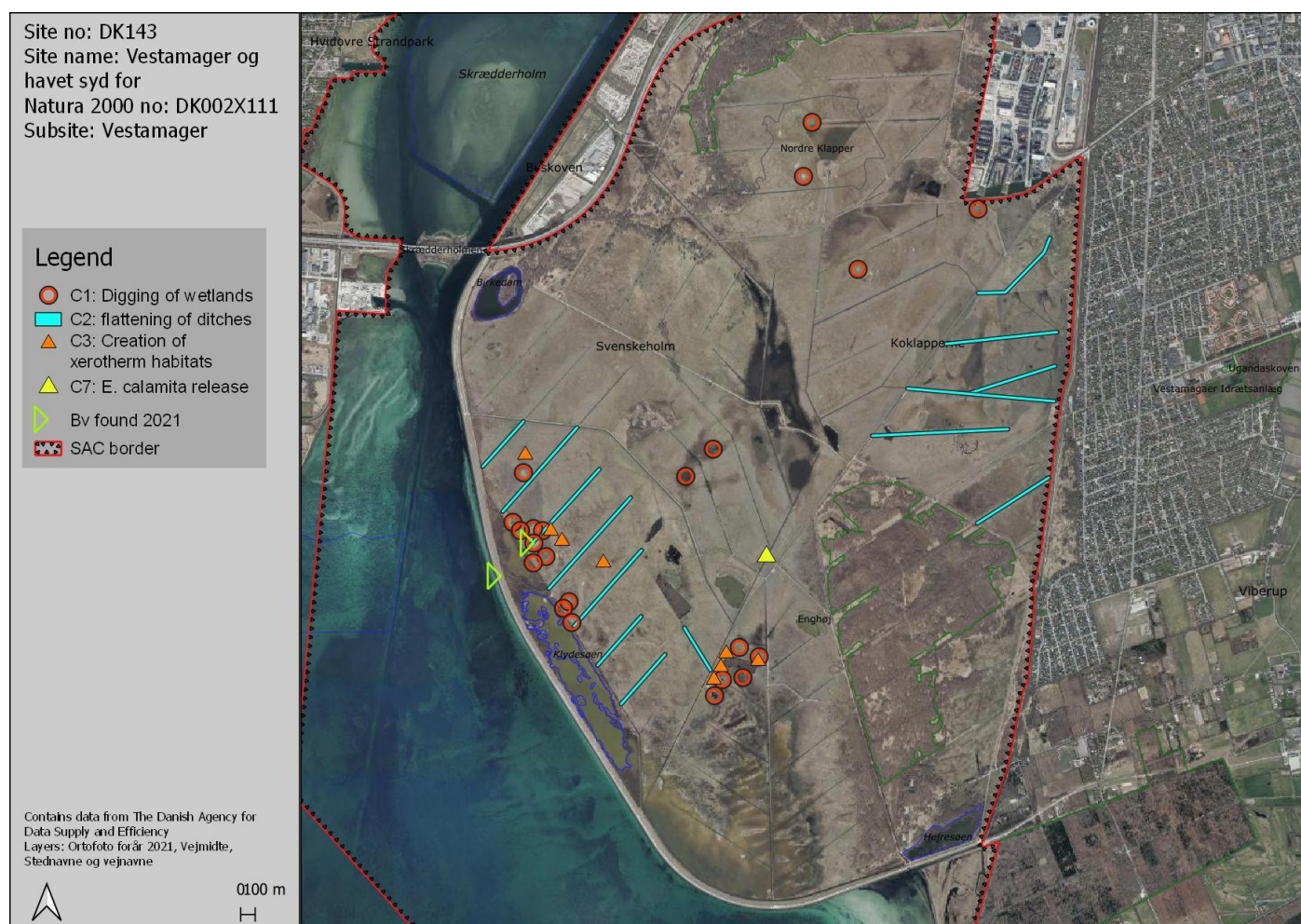


## DK143 Vestamager

Both *B. viridis* and *E. calamita* are target species at Vestamager, the latter being recently extinct. The project has aimed at restoring the population of *E. calamita* by releasing reared tadpoles and young toads.

The population of *B. viridis* is considered to be rather small compared to the vast habitat of the site. In May 2017 a total of 82 males of *B. viridis* were found. There was a great lack of suitable breeding sites without fish and without competition from brown and green frogs. *B. viridis* historically has lived on the whole site but today is only found in the lowest lying and still part salty area of the site. It seems that the distribution of *B. viridis* has been restricted to the southwestern part of the site that the more common amphibian species still have not colonized. There is a 27 km long network of step, deep and overgrown ditches on Vestamager which has favored colonization of green and brown frogs. They live and breed in the permanently waterfilled ditches and are sheltered by the dense vegetation. Also, presence of two larger forests on the site is negative towards *B. viridis* since the forests are a good habitat of several competing amphibian species.

The project has dug many new shallow breeding waters for *B. viridis* mainly in the southwestern part of the site where the species still occurs. Also, about ten km of the old ditches have been transformed into shallow depressions as breeding sites of *B. viridis* and *E. calamita* as well as foraging sites of wader birds. *B. viridis* was in 2021 breeding in one of the new dug depressions in the southwestern edge of the site.





### Species reintroduction (*E. calamita*)

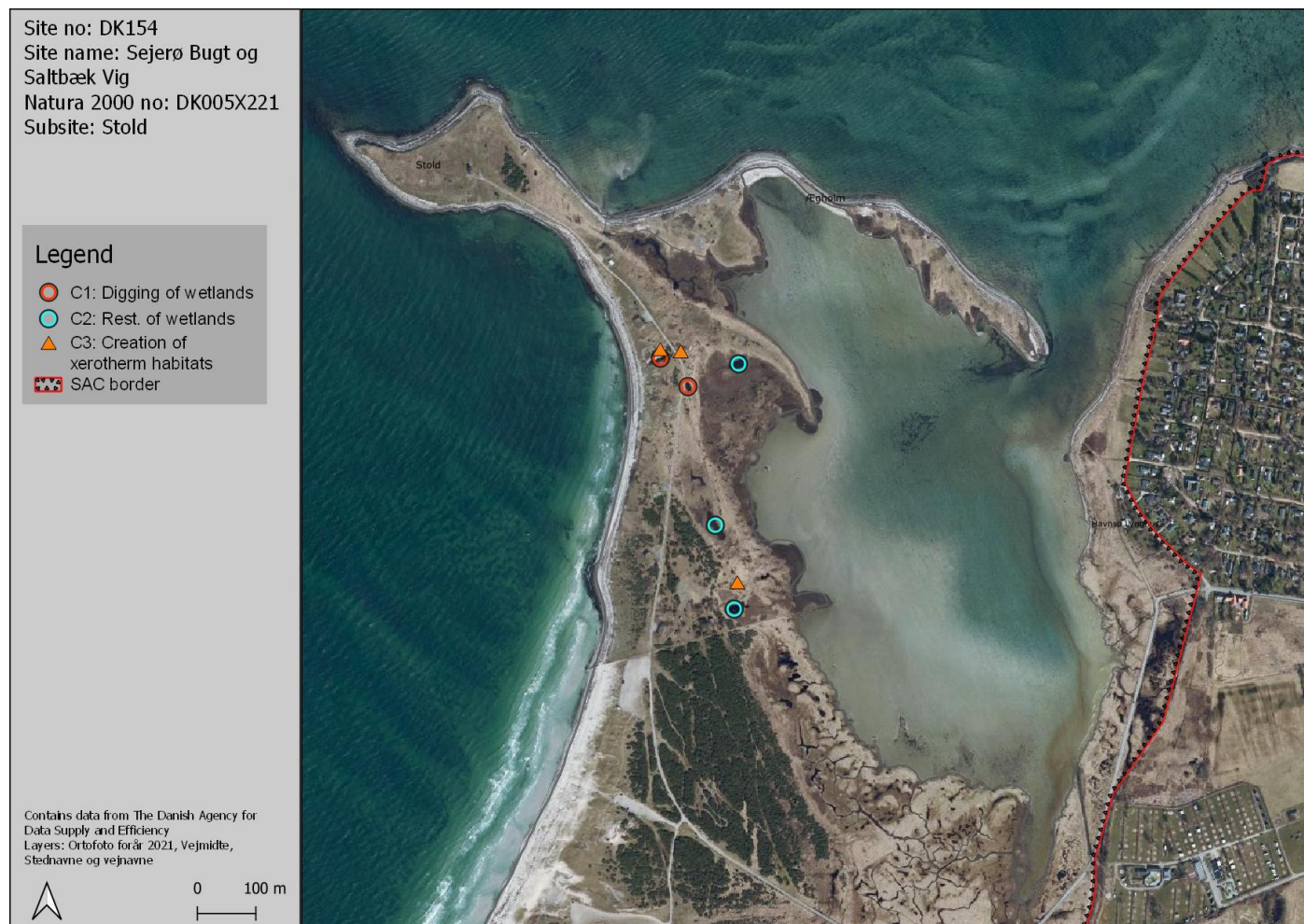
During 2018-2020 2.000 young toads and 4.000 tadpoles of *E. calamita* was released at the site. There has been no recording of *E. calamita* on the site yet.



*New shallow depression aimed at being future breeding site of B. viridis and E. calamita.*

## DK 154 Stold

*B. viridis* and *E. calamita* are target species but are extinct on the site. On Nekselø, which is located 500 m north of Stold Skydeterræn, there are *B. bombina*, *T. cristatus*, *R. arvalis*, *P. fuscus*, *E. calamita*, *B. viridis* and *L. agilis*. It is hoped that *E. calamita* and *B. viridis* will be able to spread to Stold Shooting Range from Nekselø. The background for the extinction of the 2 target species is considered to be a lack of suitable breeding sites.







One of the new ponds (the one closest to the road)

### DK162 Agersø, Stignæs, Glænø, Omø

Target species are *B. bombina*, *B. viridis* and *E. calamita*. *B. bombina* and *T. cristatus* are on the designation basis for the Natura 2000 site. In addition, *R. arvalis*, *B. viridis* and *E. calamita* occur.

*B. bombina* occurs on the northern half of Agersø in total with about 100 calling males. Sticklebacks in a number of otherwise excellent potential breeding sites is a limiting factor of the population. On Glænø, only 4-5 calling *B. bombina* were heard in 2016, while the *B. bombina* became extinct on Omø and on Stignæs. The reason is thought to be the intensive farming and the lack of potential breeding sites, and nearby suitable wintering sites which are a limiting factor in relation to achieving favorable conservation status. *T. cristatus* occurs in most of the fish-free ponds throughout the Natura 2000 area. *E. calamita* is widespread on both Agersø and Omø, while *B. viridis* is found throughout the Natura 2000 area. Both species breed especially in the large shallow floodings on the salt meadows. The threat to the two rare toad species is especially the presence of sticklebacks in the shallow floodings. *R. arvalis* is also occurring scattered throughout the area.

### Species reintroduction (*H. arborea*)

In DK162 species introduction has been done in 30 different ponds, some with more than one species, *B. bombina* has been introduced in 14 ponds, *Bv* in 15 ponds, and *E. calamita* in 11 ponds of which 20 ponds have been checked for calling males.



Site no: DK162  
Site name: Skælskør Fjord og  
havet og kysten mellem  
Agersø og Glæno  
Natura 2000 no: DK005Y229  
Subsite: Agersø - map 1 of 2

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of xerotherm habitats
- C7: Species reintroduction
- To found 2021
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejnmidte,  
Stednavne og vejnavne



0 100 m



Site no: DK162  
Site name: Skælskør Fjord og  
havet og kysten mellem  
Agersø og Glæno  
Natura 2000 no: DK005Y229  
Subsite: Agersø - map 2 of 2

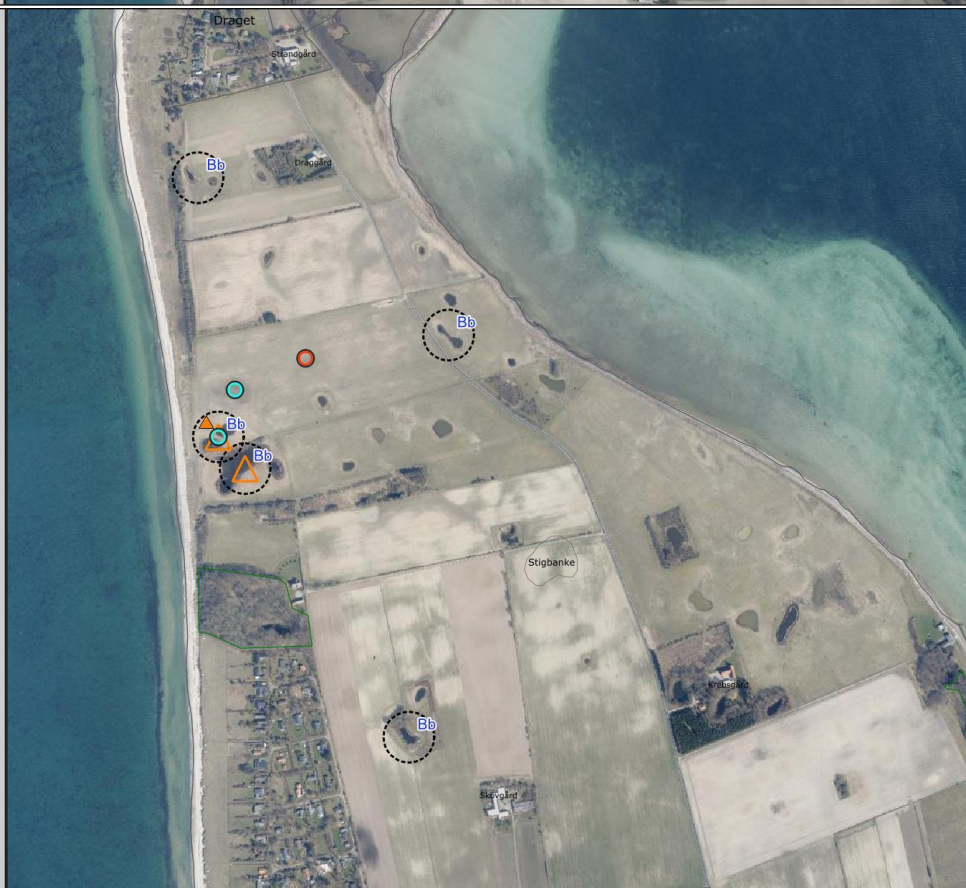
#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of xerotherm habitats
- C7: Species reintroduction
- Bb found 2021
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejnmidte,  
Stednavne og vejnavne



0 100 m









Site no: DK162  
Site name: Skælskør Fjord og havet og kysten mellem Agersø og Glæne  
Natura 2000 no: DK005Y229  
Subsite: Stignæs (Stignæs, Gaden south of Mindeshovedvej)

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of xerotherm habitats
- C7: Species reintroduction
- To found 2021
- SAC border

Contains data from: The Danish Agency for Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmide, Stedname og vejname



Site no: DK162  
Site name: Skælskør Fjord og havet og kysten mellem Agersø og Glæne  
Natura 2000 no: DK005Y229  
Subsite: Stignæs, Gaden

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- C7: Species reintroduction
- To found 2021
- SAC border

Contains data from: The Danish Agency for Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmide, Stedname og vejname







*Restored pond on Agersø*



*Restored pond on Glænø with *T. cristatus* and *R. dalmatina* 2016-2021*



*New pond from Stignæs, Gaden with *T. cristatus**



## DK 163 Holmegaards Mose, Tystrup-Bavelse

*T. cristatus* and *H. arborea* are target species of the project actions. *T. cristatus* occurs within the Natura 2000 area and is on the designation basis. In addition, *R. dalmatina* and *R. arvalis* occur as target species. Adjacent the area, there is a small and dwindling population of *H. arborea* at Regnstrup Overdrev / Kastrup Dyrehave. This population has spread into the Natura 2000 area several times. In general, there is a lack of suitable breeding sites for amphibians. Partly the potential breeding sites are in intensively cultivated fields, and partly the potential breeding sites are eutrophied. In addition, there is a lack of suitable wintering sites.

### Species reintroduction (*H. arborea*)

In DK163 *H. arborea* has been introduced in 3 ponds, all of which have been checked for calling males.





Site no: DK163  
Site name: Suså med  
Tystrup-Bavelse Sø og  
Slagmosen  
Natura 2000 no: DK006Y275  
Subsite: Næsbyholm, Glumso

#### Legend

- C1: Digging of wetlands
- ★ Rd found 2021
- ▬ SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto for år 2021, Vejmidte,  
Stednavne og vejnavne



0 100 m



Site no: DK163  
Site name: Suså med  
Tystrup-Bavelse Sø og  
Slagmosen  
Natura 2000 no: DK006Y275  
Subsite: Rejnstrup,  
Gunderslevholm Gods  
(Tystrup)

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- △ C3: Creation of  
xerotherm habitats
- C7: Species  
reintroduction
- Ha found 2021
- ★ Rd found 2021
- Tc found 2021
- ▬ SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto for år 2021, Vejmidte,  
Stednavne og vejnavne




0 100 m





0      100 m



*New pond with R. dalmatina, Næsbyholm, Glumsø*





Restored pond near Rejnstrup with *H. arborea*, *T. cristatus* and *R. dalamatina*.

## DK 168 Vestmøn

*T. cristatus*, *H. arborea*, *B. viridis* and *E. calamita* are target species for the actions. *T. cristatus* occurs in the area and is on the designation basis. *B. viridis*, *H. arborea* and *L. agilis* also occur in the area, while *E. calamita* is extinct. In addition, *R. dalamatina* and *R. arvalis* occur. *T. cristatus* occurs throughout the area in suitable breeding sites. *L. agilis* occurs on Vestmøn and Bogø. *H. arborea* is found in a small but stable population at Roneklint, approx. 40 calling males, while *B. viridis* is considered vulnerable with 30-40 calling males on Vestmøn and Bogø. Unfortunately, it seems that the last population of *E. calamita*, which was on Tærø, is extinct. Both *E. calamita* and *B. viridis* suffer from the fact that the majority of ponds and flooding on the beach meadows contain fish. *H. arborea* is vulnerable due to lack of suitable breeding sites partly due to eutrophication, partly due to fish. Furthermore, all target species suffer from a lack of suitable wintering sites.

### Species reintroduction (*E. calamita* & *H. arborea*)

In DK168, a total of *E. calamita* has been introduced in 7 ponds (Fanefjord) and *H. arborea* in 5 other ponds (Kragevig, Roneklint). All 12 ponds are checked for calling males.



Site no: DK168  
Site name: Havet og kysten  
mellem Præsto Fjord og  
Grønsund  
Natura 2000 no: DK006X233  
Subsite: Fanebjerg, Møn

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- C7: Species reintroduction
- ★ Rd found 2021
- Tc found 2021
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejnmidte,  
Stednavne og vejnavne



0 100 m



Site no: DK168  
Site name: Havet og kysten  
mellem Præsto Fjord og  
Grønsund  
Natura 2000 no: DK006X233  
Subsite: Kragevig,  
Jungshoved - map 1 of 2

#### Legend

- C1: Digging of wetlands
- Ha found 2021
- ★ Rd found 2021
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejnmidte,  
Stednavne og vejnavne



0 100 m





Site no: DK168  
Site name: Havet og kysten  
mellem Præsto Fjord og  
Grønsund  
Natura 2000 no: DK006X233  
Subsite: Kragevig,  
Jungshoved - map 2 of 2

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- C7: Species reintroduction
- Ha found 2021
- ★ Rd found 2021
- Tc found 2021
- SAC border

Contains data from: The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmidthe,  
Stednavne og vejnavne



0 100 m



Site no: DK168  
Site name: Havet og kysten  
mellem Præsto Fjord og  
Grønsund  
Natura 2000 no: DK006X233  
Subsite: Roneklint

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- C7: Species reintroduction
- Ha found 2021
- ★ Rd found 2021
- Tc found 2021
- SAC border

Contains data from: The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmidthe,  
Stednavne og vejnavne



0 100 m







*Restored pond by Fanefjord, Møn with *T. cristatus*, *R. dalmatina* and *B. viridis**



*New pond with *R. dalmatina* from Kragevig, Jungshoved*

## DK 169 Enø, Gavnø, Svinø, Knudshoved Odde

Target species are *B. bombina*, *B. viridis*, *E. calamita*, *H. arborea* and *P. fuscus*. *B. bombina* and *T. cristatus* are on the designation basis for the Natura 2000 site. In addition, *R. arvalis*, *H. arborea*, *R. dalmatina*, *B. viridis*, *E. calamita* and *L. agilis* occur. The *B. bombina* occurs on Knudshoved Odde with an estimated about 200 calling males. In addition, there has been a stock on Enø and on Avnø, but both of these stocks are extinct. *P. fuscus* occurs in an isolated and vulnerable population on Knudshoved Odde. *E. calamita* occurs in a stable population on Knudshoved Odde of approx. 50 croaking males, on Dybsø with approx. 50 quacking males and on Avnø with 5-10 quacking males. *B. viridis* occurs on Knudshoved Odde and on Svinø in stable populations. *L. agilis* occurs along the coast on coastal slopes and beaches. *R. dalmatina* and *R. arvalis* occur throughout the area in suitable breeding sites, while *H. arborea* occurs in a large population of approx. 200 calling males on Knudshoved Odde on the basis of a release with South Zealand animals. *T. cristatus* occurs in most of the fish-free lakes throughout the Natura 2000 area. The threat to *B. bombina* and *P. fuscus* is especially a lack of suitable breeding sites or a lack of biotope networks incl. suitable wintering sites. The potential in the area is very large.

### Species reintroduction (*B. bombina* & *E. calamita*)

In DK169 species reintroduction has taken place in a total of 14 ponds different ponds, of which *B. bombina* is introduced in 7 ponds, *B. viridis* in 3 ponds and *E. calamita* in 13 ponds, all of which have been checked for calling males.





Site no: DK169  
Site name: Havet og kysten  
mellem Karrebæk Fjord og  
Knudshoved Odde  
Natura 2000 no: DK006X234  
Subsite: Flyvestation Avnø

### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of xerotherm habitats
- C7: Species reintroduction
- ▲ Bb found 2021
- ▲ Bv found 2021
- Tc found 2021
- SAC border

Contains data from: The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto for år 2021, Vejmide,  
Stednavne og vejnavne



0 100 m



Site no: DK169  
Site name: Havet og kysten  
mellem Karrebæk Fjord og  
Knudshoved Odde  
Natura 2000 no: DK006X234  
Subsite: Stenbæksholm,  
Karrebæk

### Legend

- C1: Digging of wetlands
- C7: Species reintroduction
- SAC border

Contains data from: The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto for år 2021, Vejmide,  
Stednavne og vejnavne



0 100 m





Site no: DK169  
Site name: Havet og kysten  
mellem Karrebæk Fjord og  
Knudshoved Odde  
Natura 2000 no: DK006X234  
Subsite: Vester Egesborg

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of  
xerotherm habitats
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto forår 2021, Vejmidte,  
Stednavne og vejnavne



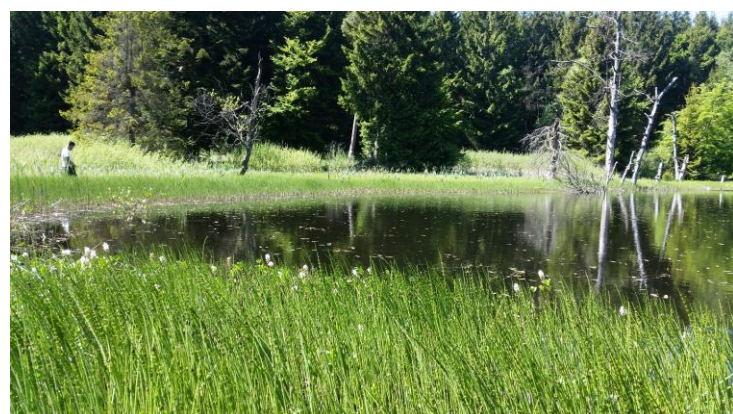
0 100 m



Restored pond with *T. cristatus* and *B. viridis*.



The semiaquatic insects *Graphoderus bilineatus*, *Dytiscus latissimus* and *Leucorrhinia pectoralis* are target species of the actions on the site. *T. cristatus* is designated for the Natura2000 site and will also surely benefit from digging and restoring of ponds since there is a great lack of fish-free waters with a good water quality. A few adults have been found in the lakes but no larvae. *H. arborea* occurs on Bornholm but not within the forest and thus will not benefit from the new waters. *Rana dalmatina* is found breeding in several lakes in the forest and will also for sure benefit from the new and restored ponds. The actions were carried out so late that no colonization of *T. cristatus* could be monitored.



*Forest lake.*



## DK 235, Jægerspris Skydeterræn

*T. cristatus*, *P. fuscus* and *L. agilis* are target species. *T. cristatus*, *P. fuscus*, *R. arvalis* and *L. agilis* all occur in the area. *T. cristatus* is on the designation basis. *T. cristatus* and *R. arvalis* occur throughout the terrain in suitable ponds, while *P. fuscus* occurs only in the northern part of the terrain and cannot spread due to lack of suitable breeding lakes, while some of the current ponds are eutrophied and overgrown with willow and Typha. *L. agilis* occurs scattered throughout the terrain but is under pressure due to overgrowth of dry grasslands with shrubs and trees, as well as *R. rogusa*. There is a very large potential for all 3 species.





Site no: DK235  
Site name: Jægerspris  
Skydeterræn  
Natura 2000 no: DK003X297  
Subsite: Jægerspris - map 2  
of 2

#### Legend

- C1: Digging of wetlands
- C2: Rest. of wetlands
- ▲ C3: Creation of xerotherm habitats
- Tc found 2021
- SAC border

Contains data from The Danish Agency for  
Data Supply and Efficiency  
Layers: Ortofoto for år 2021, Vejmidthe,  
Stednavne og vejnavne



0 100 m



Restored pond with *T. cristatus* and *R. arvalis*.