Survey species experts | Overview questions

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Inhoud

Preface

Are you interested in the results of this survey? If so, please provide your e-mail address.

Which species are you reporting on?

- [lijst met invasieve uitheemse soorten]

Which invasion stage is the species in in Flanders?

- absent
- sporadically present
- established to limited extend
- widespread

Introduction & establishment

How many current and potential introduction sites are there and how widespread are these?

Introduction sites refer to locations related to routes through which the species enters Flanders, such as through transportation, trade, ornamental plants, domestic animals and other human activities. This also includes the natural spread of invasive populations from neighbouring countries into Flanders. Choose one of the following options.

- limited number of specific locations (e.g. seaports)
- large number of widespread locations (e.g. freshwater bodies if the species is mainly released from aquaria)
- both specific and widespread locations
- unknown
- I do not know

Optional: Briefly explain the chosen answer (e.g. which introduction sites are mainly concerned) and indicate any sources used.

How accessible are the current and potential introduction sites?

Choose one of the following options.

- mainly publicly accessible domains
- mainly publicly non-accessible domains (e.g. private, commercial, military domains)
- both publicly accessible and non-accessible domains
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

Are there within the current or potential introduction sites of the species locations that need special attention for some reason?

Reply via a concise free text. Please indicate the reason for your selection.

How large is the probability that the species will be introduced in Flanders in the next 10 years?

The question focuses on the probability of introduction through the current and potential introduction sites of the species. The distribution in neighbouring countries may also serve to estimate the probability of introduction. Choose one of the following options.

- large probability

- medium probability
- small probability
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

How large is the probability that the species becomes established in Flanders?

The probability of a species becoming established depends, among other things, on climate and habitat requirements and other ecological characteristics of the species (e.g. generalist or specialist, capacity for rapid population growth). Invasion stages in neighbouring countries or in countries with similar climate and habitat conditions may also serve to estimate the climate and habitat match for Flanders. Choose one of the following options.

- large probability
- medium probability
- small probability
- unknown
- I do not know

Optional: Briefly explain the answer chosen (e.g. which ecological characteristics are important) and indicate any sources used.

Distribution & abundance

Is the distribution of the species across Flanders sufficiently known?

The above distribution map is based on GBIF data. For the Flemish Region (area within the solid line) and a 30 km wide buffer zone (area between solid and dotted line), we mark those grid cells (EEA Reference grid, 1 x 1 km) in red within which the species has been observed during the last 10 years. You can zoom in and out using the keyboard shortcuts Ctrl + and Ctrl -. Choose one of the following options.

- yes, the distribution is sufficiently known and the distribution map is representative of it
- yes, the distribution is sufficiently known but the distribution map is not representative of it
- no, the distribution is not sufficiently known
- I do not know

Optional: Briefly explain the answer chosen (e.g. which occurrences may not be on the map) and indicate any sources used.

What is the current and potential distribution pattern across Flanders?

The potential distribution pattern can be estimated from the species' habitat preferences, and the extent to which these habitats occur in Flanders. Choose one of the following options.

- the species is locally distributed and may also only occur at a limited number of sites in Flanders
- the species is locally distributed but could potentially spread widely across Flanders
- the species is widespread and can thus found at many sites in Flanders
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

What is the current and potential population density of the species?

Choose one of the following options.

- the species has reached, or has the potential to reach, a high population density
- the species has reached, or has the potential to reach, a medium population density
- the species has reached, or has the potential to reach, a low population density
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

What level of change in the current distribution sites can be expected within 10 years?

This assessment takes into account factors such as the climate and habitat requirements of the species, the capacity of the species to spread in an area (dispersal capacity), and the expected further spread by human activity or from abroad into Flanders. Current or already planned management measures may also play a role. Choose one of the following options.

- small change expected (few additional distribution sites)
- medium change expected (medium number of additional distribution sites)
- large change expected (many additional distribution sites, change in distribution pattern from local to widespread)
- unknown
- I do not know

Optional: Briefly explain the answer chosen (e.g. which factors mainly determined the assessment) and indicate any sources used.

How accessible are the current and potential distribution sites?

Choose one of the following options.

- mainly publicly accessible domains
- mainly publicly non-accessible domains (e.g. private, commercial, military domains)
- both publicly accessible and non-accessible domains
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

Are there within the current or potential distribution sites of the species locations that need special attention for some reason?

Reply via a concise free text. Please indicate the reason for your selection.

Impact

What level of negative impact of the species can be expected on biodiversity and ecosystem services in Flanders?

This question assumes that the species is or will be invasive and occupy suitable areas in Flanders. For species already present, this can be based on actual observed effects. For other species, the estimate may be based on similar situations in other countries, the ecology of the species, similarity to other invasive species, or other relevant factors. Choose one of the following options.

- large negative impact expected
- medium negative impact expected
- small negative impact expected
- not applicable as species is unlikely to become invasive in Flanders within 10 years
- unknown
- I do not know

Optional: Briefly explain the chosen answer (e.g. which impact mechanisms are mainly at play) and indicate any sources used.

To what extent will the expected negative impact of the species on biodiversity and ecosystem services manifest in conservation or Natura 2000 areas?

Choose one of the following options.

- mainly in conservation or Natura 2000 areas
- mainly outside conservation or Natura 2000 areas
- both inside and outside conservation or Natura 2000 areas
- not applicable as species is unlikely to become invasive in Flanders within 10 years
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

What level of negative impact of the species can additionally be expected in other domains?

This question concerns the expected negative impact across various other domains, such as agriculture, economy, public health and other relevant sectors, and asks for an assessment of the overall impact. Choose one of the following options.

- large negative impact expected
- medium negative impact expected
- small negative impact expected
- not applicable as species is unlikely to become invasive in Flanders within 10 years
- unknown
- I do not know

Optional: Briefly explain the answer chosen (e.g. which domains are mainly concerned) and indicate any sources used

Surveillance

Which surveillance techniques are available for the species?

This may include, for example, the use of eDNA for invasive fish species or camera traps for nocturnal invasive mammals. Other examples may include other types of traps, visual surveys, or acoustic surveillance, depending on the species. Choose one or more of the following options.

- visual surveys
- acoustic surveys
- passive acoustic surveillance (through automatic recordings)
- camera traps
- pheromone traps
- light traps
- colored traps
- pitfall traps
- environmental DNA: water
- environmental DNA: soil
- environmental DNA: air
- electrofishing
- other

Optional: Briefly explain the answer chosen (e.g. what other surveillance techniques are available) and indicate any sources used.

Which of the surveillance techniques chosen above is the most relevant for the species?

Reply via a concise free text. Please indicate the reason for your selection.

What is the level of sensitivity of this most relevant surveillance technique?

The sensitivity indicates how well a method is able to detect the presence of a species or a minimally relevant (change in) population size. With a high sensitivity, the probability of detecting this presence is large if the species or a minimally relevant (change in) population size is actually present. A high sensitivity also leads to a small percentage of false-negative results. Choose one of the following options.

- high sensitivity
- medium sensitivity
- low sensitivity
- unknown
- I do not know

Optional: Briefly explain the answer chosen and indicate any sources used.

What is the level of specificity of this most relevant surveillance technique?

The specificity indicates how well a method can detect the absence of a species or a minimally relevant (change in) population size. With high specificity, the absence is likely to be detected if the species or minimum relevant (change in) population size is actually absent. High specificity also leads to a small percentage of false-positive results. Choose one of the following options.

- high specificity
- medium specificity
- low specificity
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

How high are the costs of this most relevant surveillance technique?

Costs may be associated e.g. with the time to measure a sampling point, data processing, staff deployment, staff training and the use of equipment. Low costs apply e.g. when volunteers can easily observe the species or can do so with limited training by experts. Medium costs are expected e.g. when methods require specialised equipment and technical knowledge, such as eDNA analysis or the use of camera traps. High costs arise when e.g. genetic analyses are needed for cryptic species or e.g. when detailed morphological research by experts is required. Choose one of the following options.

- low costs
- medium costs
- high costs
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

Is this most relevant surveillance technique mainly suited to determine the presence or absence of the species, or can absolute or relative numbers also be determined?

Choose one of the following options.

- presence or absence only
- also relative numbers
- also absolute (and relative) numbers
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

Is there a standardised and optimised field protocol available?

A standardised field protocol clearly defines the entire measurement procedure and thus ensures objectivity. An optimised field protocol contains information on optimal times and weather conditions for measuring a species, thus ensuring a sufficient and stable detection probability. Choose one of the following options.

- yes
- yes, but the field protocol is only standardised
- yes, but the field protocol is only optimised
- no
- unknown
- I do not know

Briefly explain the chosen answer (e.g. which field protocol is concerned). Also indicate the sources used.

Which existing surveillance schemes in Flanders are relevant to the species?

We consider surveillance schemes relevant if they potentially or actually pick up the species. This can cover certain specific populations of the species as well as the entire distribution area. Choose one or more of the following options.

- Common Breeding Birds Project (Algemene Broedvogelmonitoring Vlaanderen)
- Flemish Butterfly Monitoring Scheme (Algemene vlindermonitoring)
- Rare Breeding Birds Project (Bijzondere Broedvogels Vlaanderen)
- Florabank
- Marten Network (Marternetwerk)
- Meetnetten.be
- Moth Monitoring Scheme (Nachtvlindermeetnet)
- Fish Monitoring Scheme (Vis Informatie Systeem)
- Wintering Waterbird Counts (Watervogeltellingen)
- Winter Bats Counts (Wintertellingen Vleermuizen)
- other
- none
- I do not know

Optional: Briefly explain the chosen answer (how the surveillance scheme is relevant and what the possible strengths and weaknesses are for detecting the species) and indicate any sources used.

To what extent do opportunistic observations (e.g. collected via waarnemingen.be) provide a representative picture of the species' distribution?

Choose one of the following options.

- high representativeness
- medium representativeness
- low representativeness
- unknown
- I do not know

Optional: Briefly explain the chosen answer and indicate any sources used.

Management

Is the species currently managed in Flanders?

This question addresses existing management measures, which may focus on: eradication under rapid response; containment of one or more established populations to avoid or further delay spread; keeping specific areas, such as conservation areas, pest-free; limiting the abundance of the species below a threshold level. Choose one of the following options.

- yes
- no
- unknown
- I do not know

Optioneel: Licht het gekozen antwoord kort toe (bv. over welke beheersdoelen en -maatregelen het gaat en waar de soort beheerd wordt) en geef eventueel gebruikte bronnen aan.

If it is decided to manage the species, or if the species is already managed in Flanders, what information is needed to evaluate the effectiveness of the management measures?

This question again deals with existing and or to be established management measures (see explanation of previous question). Depending on the measures chosen, an evaluation of effectiveness requires different types of information. Choose one of the following options.

- presence or absence of the species
- relative population size of the species
- absolute population size of the species
- no direct information on the species because other variables suffice (e.g. damage caused by species serves as proxy for population size)
- unknown
- I do not know

Optional: Briefly explain the chosen answer (e.g. what management measures are involved and what possible proxy variables are involved) and indicate any sources used.