



Competition brief “Shelter for All”



Photo: Digital Vision

Many of our fruit trees and flowers are pollinated by domesticated and wild bees. Without them, we risk seeing the collapse of the entire ecosystem. In Sweden, there are almost 300 species of bee. The wild bees are either solitary bees who live on their own or social bees, like the domesticated bee, who live in colonies.

Populations of pollinating insects are declining and by building insect shelters, we can help them survive the winter. Solitary bees seek out crevices and holes under stones, in plant stems, cracks in a barn wall or empty snail shells. Other bees, wasps, butterflies and ladybirds have different housing demands when it comes to overwintering.

Many urban areas lack the natural places that insects need to hibernate over the winter, since modern building materials lack the various properties required.

We are looking for interesting and functional solutions for a visionary insect shelter. We want the entrants to consider how their insect shelter works in relation to the surrounding buildings/architecture and green spaces. We also want the entries to include ideas about the meeting and interplay between insects and people. Can the shelters be designed in a way that makes it more acceptable to have insects near people's homes?

INVITATION

In partnership with NCC, KTH Royal Institute of Technology and Bee Urban and with the support of the Swedish Association of Architects, Dome of Visions invites students to participate in an architectural competition to design an insect shelter.

The competition will run from 24th of May to 26th of August 2016 and is open to all architectural students studying at a Swedish higher education institution with an architecture course: Umeå School of Architecture, KTH School of Architecture, LTH Department of Architecture and Built Environment, Chalmers Architecture, Konstfack, HDK, BTH, SLU Ultuna and SLU Alnarp. Collaboration with students from other programs is possible, as long as there is at least one architecture student in the team.

A jury will select 10 finalists from the submitted entries.

The winning entry will be awarded a prize of SEK 20,000.

A number of entries will also receive an honorable mention.

10 finalists, including the winning entry and entries with an honorable mention, will be presented in an exhibition at Dome of Visions in September.

LAUNCH MEETING

Josefina Oddsberg from Bee Urban will give a public talk in Dome of Visions on the 24th of May 2016. The talk will give some background to the competition and information on the importance of biodiversity and what insect shelters can mean for the environment. This talk will also be filmed and posted online. See <http://domeofvisions.se/> for more information. The talk is intended to help the competitors and attendance is not compulsory.

PURPOSE

The purpose of the competition is to promote interest in nature and ecology in urban environments, and more specifically to promote interest in the role that insects play in the city's ecosystem. Entrants are asked to design an insect shelter with space for several species that can be placed in one or more locations on the KTH campus, as specified in this competition brief.

OBJECTIVE

The entries should highlight the role and function of the insects in the local ecosystem, and the insect shelters' relationship with the surrounding architecture and green spaces. Consideration should also be given to the people who live and spend time in the vicinity, with the entries presenting new ideas on how insects can be given a better place in the city.

COMPETITION TASK

The task of the competition is to create a new and innovative insect shelter in terms of function, aesthetics and interplay. The shelter should serve as a place for insects to hibernate over the winter. It should also challenge the idea of what an insect shelter can be in aesthetic terms. Finally, the shelter should be set in its context, in an interplay with people in urban environments and their nearby green spaces. The program documentation includes an appendix with information on insect shelters.

CONDITIONS

The competition entry must comprise one (1) insect shelter for various species of flying insects, including solitary bees, wasps, bumblebees and butterflies. The shelter is to be designed for and adapted to the conditions in the locations on the KTH campus as described in the program documentation. The shelter must also take account of the interdependence between the surrounding greenery and the insect populations, i.e. what plants are near the intended site, or what plants should be in the vicinity for the survival of the insects.



JURY

The competition entries will be assessed by a jury comprising:

- Christina Lindbäck, SVP Corporate Sustainability NCC
- Charlie Gullström, Architect SAR/MSA, KTH
- Petter Andersson, Naturmiljökonsult, Calluna
- Joakim Malmquist, AQ arkitekter, appointed by the Swedish Association of Architects
- Josefina Oddsberg, Bee Urban

The jury may call in other experts as advisors. The jury's secretary is Charlotte Saltskog, Dome of Visions. The competition official is Björn Norberg, Dome of Visions.

PROGRAM DOCUMENTATION

DOCUMENTS

This program plus appendices

Appendix 1: Map of the park areas at KTH with the competition sites marked

Appendix 2: Orthophoto

Appendix 3: Photos of some adjacent buildings

Appendix 4: Information on the needs of different insects

COMPETITION QUESTIONS

Any questions about the competition should be e-mailed to competition official Björn Norberg:

bjorn.norberg@domeofvisions.se

All questions should be sent to the competition official by 12 August 2016. Mark all correspondence “*Shelter for All*”.

All questions and answers will be posted on the website at www.domeofvisions.se/shelterforall no more than a week after the final deadline for questions, i.e. 19 August 2016.

Entrants are not permitted to contact jury members directly – all questions must be addressed to the competition official.

COMPETITION ENTRY

The competition entry must be anonymous, and all submitted documents must come with an entrants motto.

The competition entry may be submitted by one individual or a team of people, but at least one of the competitors must be a student at a Swedish higher education institution with an architecture course (Umeå School of Architecture, KTH School of Architecture, LTH Department of Architecture and Built Environment, Chalmers Architecture, Konstfack, HDK, BTH, SLU Ultuna and SLU Alnarp).

The competition entry must be designed so that it can be presented on max four (4) A3-sheets, in landscape format, numbered 1–4, with the entrants motto in the bottom right-hand corner.

The competition entry is to be submitted digitally in PDF format on a USB drive (PDF files that can be opened on a Mac or PC). The digital material must be no larger than 20 Mb. Any documents that are additional to those stated below will not be included in the assessment or the exhibition. Models cannot be accepted, but photographs of a model may be included in the presentation.

The entry is to be accompanied by a sealed, opaque envelope marked with the word “Namnsedel” and the entry's slogan. This envelope should contain the name of the person submitting the entry and any colleagues, along with an address, telephone number and e-mail address.

All the material submitted, including in digital form, must be cleared of all traceable information about copyright and so on in order to guarantee anonymity.



COMPETITION LANGUAGE

The competition entries must be written in English.

EXHIBITION

10 finalists will be selected by the jury. The finalists, including the winning entry and entries with an honorable mention, will be presented in an exhibition at Dome of Visions in September. The exhibition will see the presentation of the 10 finalists' entries in the form of the four submitted A3 plans in printed form (4 x A3 sheets, landscape format). Dome of Visions will print the selected entries. All the entries will also be exhibited online, via Dome of Visions' website for the project.

SUBMISSION REQUIREMENTS

Each competition entry must include the following:

A brief description, with any illustrations and model photos, that expresses the concept of the entry through a presentation of:

- A. The insects at which the design is aimed.
- B. The architectural concept and design, including color palette, materials and finishes.
- C. Where the shelter is located, how it fits in with the surrounding green and built environment, and what interplay the shelter offers with regard to people in the vicinity.
- D. A brief technical description.

At least 1 View of the shelter(s) in their context

Drawings of the insect shelter:

- 1 Plan, scale 1:5 (or 1:10 depending on the size of the shelter)
- At least 1 Front elevation, scale 1:5 (or 1:10 depending on the size of the shelter)
- At least 1 Cross-section, scale 1:5 (or 1:10 depending on the size of the shelter)
- Any number of significant design details on a scale of 1:1

SUBMISSION

The competition ends on 26 August 2016. All entries must have been sent to the address below by this date (as confirmed by the postmark):

Björn Norberg
Dome of Visions
Valhallavägen 79
114 28 Stockholm

Mark the envelope “*Shelter for All*”.

Entries that have not been received by the competition official within three days of the closing date will not be considered by the jury.

Competition entries may also be submitted to the competition official in person at the same address, weekdays from 10 am – 4 pm from 1 August to 26 August 2016. For entries submitted directly to the competition official, a receipt is to be obtained showing the date and time of submission, to confirm that the entry was submitted in time.

The competition entry is to be accompanied by a sealed, opaque envelope marked with the word “Namnsedel” and the entrants motto. This envelope must contain a letter stating the motto, the name of the person submitting the entry and any colleagues, plus an address, telephone number and e-mail address.

JUDGING CRITERIA

The entries will be judged based on the following criteria, in no particular order, and based on the conditions and requirements set out in the competition program:

- Function as regards the insects' living conditions and their access to nearby green spaces.
- Visionary design embodying an original and innovative approach to insect shelters, their harmony with the location and the architectural quality of the result.



- Vision and innovation in relation to how the insect shelter meets the criteria for interplay between the insects and the people who live/spend time in the area.
- Viability and development potential with regard to the design and the choice of materials, how the insect shelters connect with the existing built environment, and the scope to develop the idea further.

JUDGING AND EXHIBITION

The judging is expected to be completed by the 2nd of September 2016.

Once the competition has ended, the 10 entries that reached the final, including the winner, will be exhibited in Dome of Visions, and on the Dome of Visions [website](#).

The jury's statement will be published at the same time as the competition results are announced. The results of the competition will be posted on the website: www.domeofvisions.se/shelterforall

The Swedish Association of Architects and the organizers reserve the right to publish all the competition entries on their websites and in the magazine Arkitekten och Arkitektur.

All publication of competition entries after the competition ends will include the name of the original entrant.

COPYRIGHT

The organizer retains the material right of ownership to the prize-winning competition entry.

The entrant retains copyright and usufruct over his or her entry.

Direct use of entries, wholly or to a substantial degree, is dependent on the agreement of the entrant.

RETURNING ENTRIES

Entries will not be returned.

POST-COMPETITION ASSIGNMENT

After the competition, the winning entry could possibly be further developed and realized, as long as the funding can be found and an agreement established between the winner and the producer. No customer or producer for the insect shelters is attached to the competition. Once the competition has concluded, Dome of Visions will explore interest in possible production. Further development of the entry will be conducted in partnership with the original designer/design team, once an agreement has been made with a potential producer.



Program documentation and appendices

Following pages are attachments that together constitutes the program documents of the competition:

- p. 6 Attachment 1: Useful information
- p. 7 Attachment 2: Map and ortophoto with the suitable sites for insect shelters are marked
- p. 8-19 Attachment 3: Photographies from each suitable site

Examples of different species, their needs and other useful information. You can also do your own research to find out more!

ATTACHMENT 1:

SOLITARY BEES AND OTHER SIMILAR INSECTS

Solitary bees want holes that they can crawl into. The holes may have a diameter of 4, 6 and 8 millimeters and should be at least 5 cm deep. Rushes or bamboo of these dimensions are also good, but there should be a protective roof. Protect it with netting so the bees can crawl in but the birds can't get at them.

Read more about different species and their needs here:

<http://www.nrm.se/faktaomnaturenochrymden/djur/insekterochspindeldjur/steklargetingar/binochbiholkar.42o.html> (Only in Swedish)

BUMBLEBEES

Different species of bumblebee build homes in different environments. Most seek out holes in the ground, in rock piles, tufts of grass and so on. Others nest in holes in trees and stumps. The tree bumblebee (*Bombus hypnorum*), which is brown, black and white, also seeks out holes in the walls and eaves of houses and barns. Another favorite is holes previously occupied by mice or voles. It is said that you can attract bumblebees with mouse droppings. If the queen approves the location she will insulate it. Bumblebees sit on their eggs and they need warmth. Clay roof tiles and pots in the ground can be a good start for a bumblebee nest. Help with the insulation by placing dry grass in the shelter and perhaps a little material with the scent of mice or voles.

BUTTERFLIES

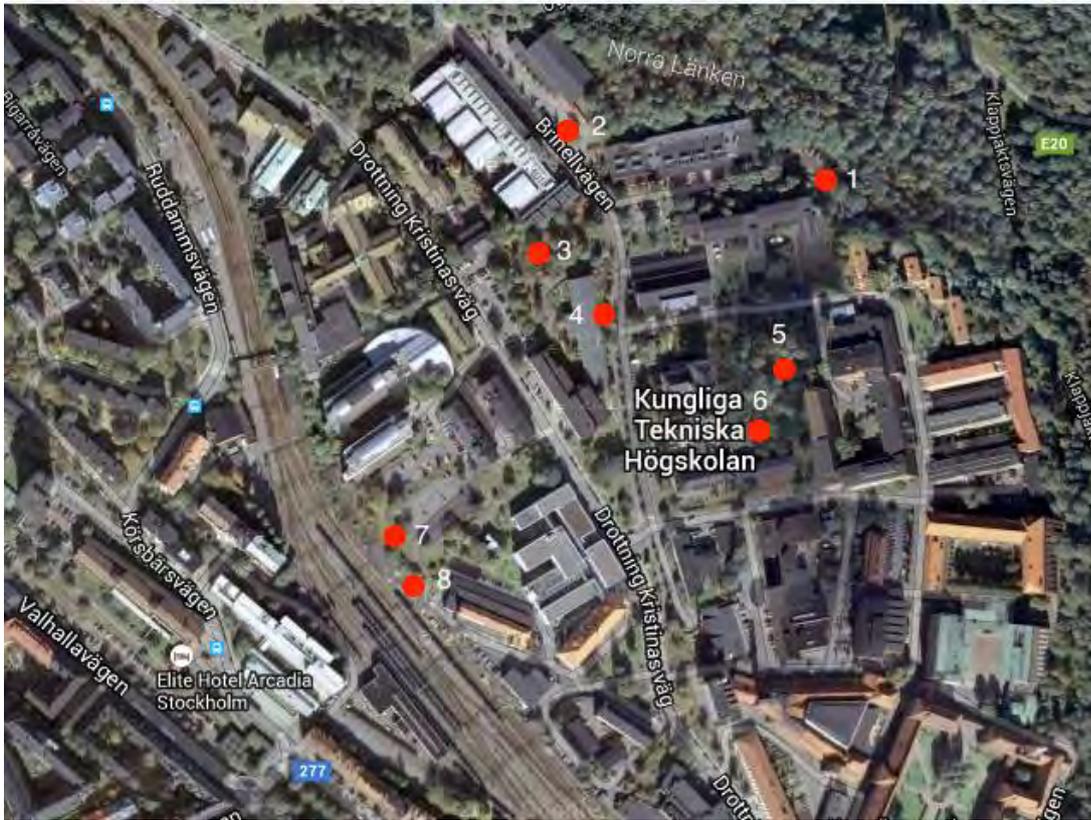
Butterfly numbers have fallen 70% since the 1990s. With changes in farming, many flowers never get to bloom, which means a lack of nectar for the butterflies. However, the overgrowth of meadows is also affecting the development of the larvae as they don't get enough sunlight. Butterfly shelters give butterflies somewhere to hibernate for the winter. They need narrow openings that they can crawl into. The shelter can be filled with coarse bark to form holes for the butterflies. There should be plants nearby that attract butterflies, such as lavender, nettles and buddleja. This will help them find the shelters more easily.

SUITLABLE SITES FOR INSECT SHELTERS, KTH CAMPUS:

Many flying insects, such as bees, rely on nesting holes and environments packed with flowers. Eight suitable locations have been identified on the KTH campus. Some are next to beds of flowering plants, while others are by rocky areas with dry meadow flora. The flora may need to be supplemented with suitable plants, which can be grown in beds or mixed seeds can be sown in more natural grassy areas.



ATTACHMENT 1:



ATTACHMENT 3:

SITE 1



SITE 2





SITE 3



SITE 4





SITE 5



SITE 6





SITE 7 & 8





