

How is it going with the Bergen bee community?

Mapping Bergens wild bee populations with traps and transect analyses

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1. Not just the honeybees, but the bumblebees, and the wild bees too

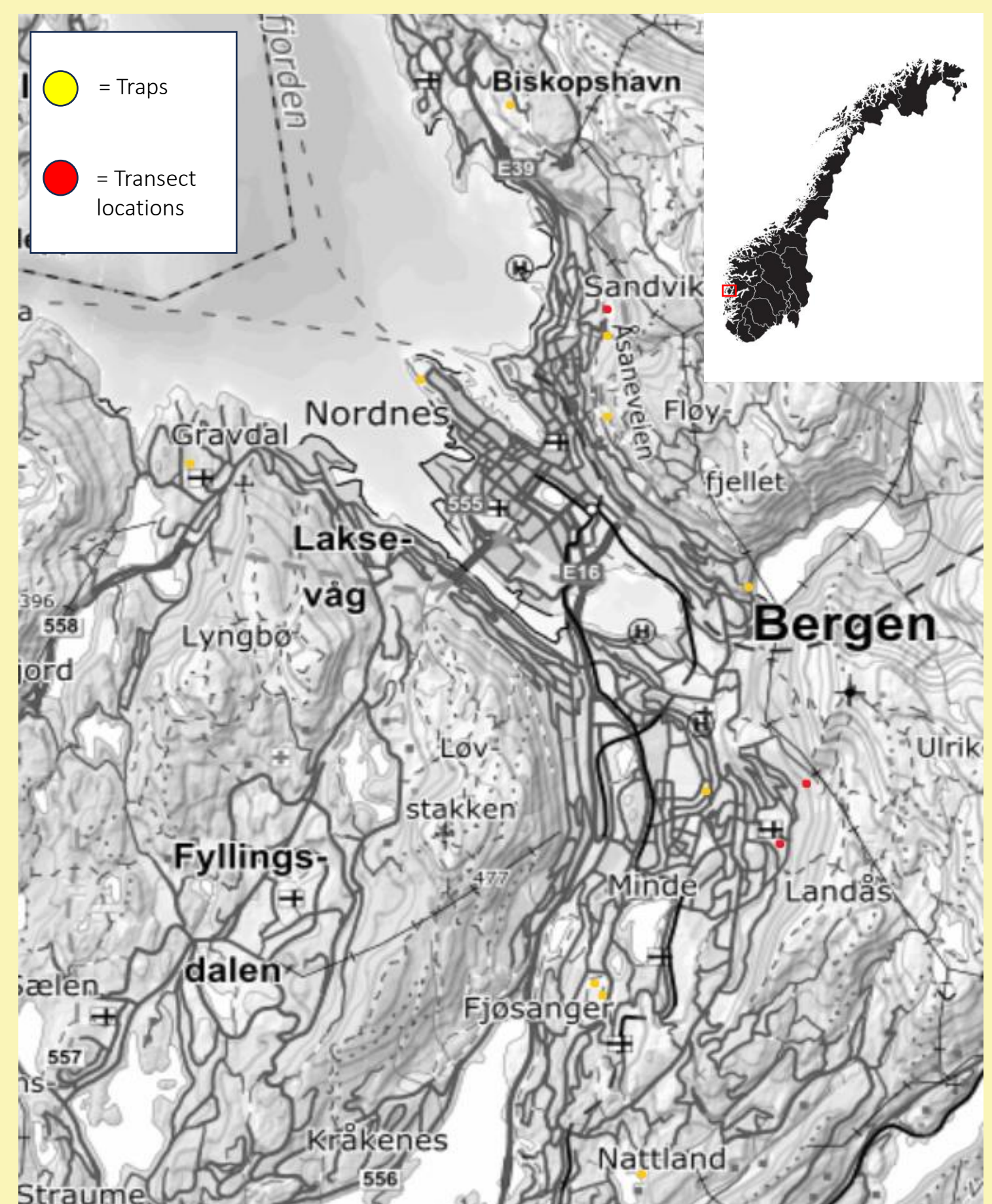
Norway has 211 bee species with honeybees being just one of them. Bumblebees contribute 35 species to this diversity, with the remaining ranging in size from above honeybees to a fingernail on the little finger.¹ Studies show they pollinate certain flowers more effectively than honeybees²; however, habitat loss is threatening wild bee populations as it is threatening many other forms of life.

In order to protect our bee species, we first need to know what we can find, where we can find them and who they might be. This was done by mapping the bee species that can be found here in Bergen.

2. Bee collection

Bee populations were sampled by setting out pantraps and vane traps in 10 different locations biweekly for a sample period of 3 days, and by doing transect analyses in three parcel gardens. Bees not identified on the wing during transect analysis and bees caught in traps were brought to a lab for identification through key.

3. Sampling sites



4. Results

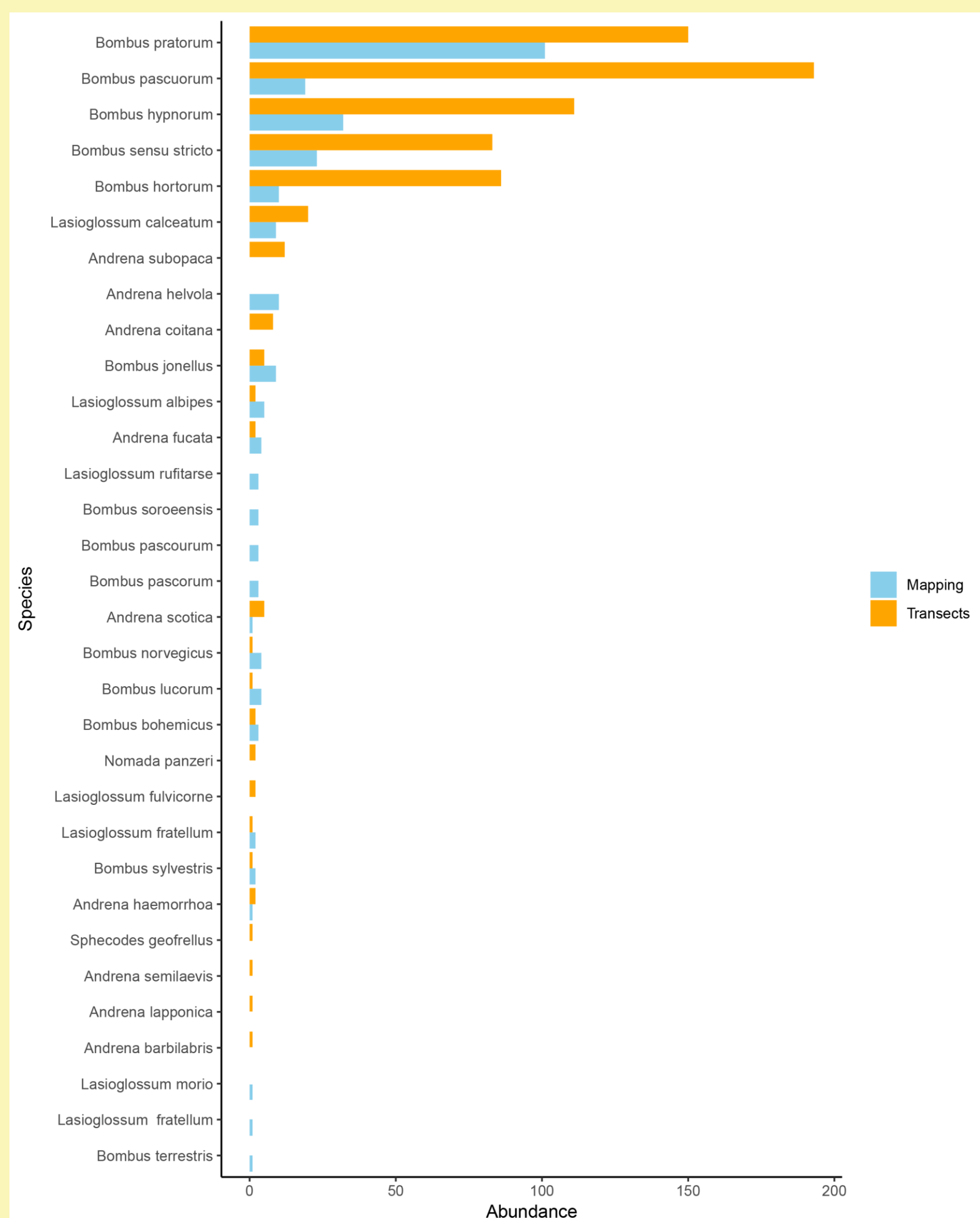


Figure 1: Abundance of bee species richness gathered from different collection methods. Bees collected from traps in blue, and bees captures during transect analysis in orange .

5. Further efforts

Bergens bee population has been under observation for a long time already, with both professional researchers and hobby entomologist. Both these group contribute to research on this and add new data to Artsdatabankens "artskart". This makes it easy to compare results to historic data and check if bee species have largely appeared, disappeared or reappeared.

References:

- ¹Artsdatabanken (Fall 2024) | Arter på nett | Bier available at: <https://www.artsdatabanken.no/arter-pa-nett/villbier>
- ²Mallinger, R.E. and Gratton, C. (2015) 'Species richness of wild bees, but not the use of managed honeybees, increases fruit set of a pollinator-dependent crop', *Journal of Applied Ecology*, 52(2), pp. 323–330. Available at: <https://doi.org/10.1111/1365-2664.12377>.

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