Wild flowering landscapes & bee-friendly farm machinery announced as winners of this year's European Bee Award

Landscape scale initiative "B-lines" and the "Double Knife system" mowing technology stand out among the pool of 27 contestants from 17 European countries

Beatriz ARRIBAS, CEMA, Ana CANOMANUEL, ELO

Now in its third edition, the prestigious European Bee Award organised by ELO and CEMA, awards innovative projects in two different categories: 'land manager practices' helping to protect pollinators' habitat in the farmed environment and 'innovative & technological solutions', aiming at reducing the impact of farming activities on pollinators' populations.

The projects "B-lines – connecting landscape for pollinators" from the UK has won the land management practices category, while the "Double Knife system with automatic grinding machine" from Germany won the award for innovative technology solutions. We had the chance to speak to the coordinators about the goals and future developments of the projects.

Paul EVANS is the co-ordinator of Buglife's project "B-lines – connecting landscape for pollinators":

'B-lines' project is focused on restoring wild-flower habitats in order to protect pollinators in the UK. How did this idea came up?
Buglife have been very concerned by bee declines over the past twenty years, we looked at the underlying causes and discovered that around "3 million hectares of wildflower rich meadows had disappeared since 1945 in the UK" leading to fragmented and isolated pollinator communities. B-Lines is our attempt to reverse this decline.

What are the main actions and practises 'B-lines' is undertaking to conserve insect pollinators?
Firstly B-Lines maps areas, usually a county at a time in consultation with local wildlife groups, landowners and other interested parties. Initially plotting areas that are still good for bees and then we seek to provide connectivity by choosing the best corridors to join these important areas together and connect with neighbouring areas. The second phase is to facilitate the filing in of the mapped B-Lines with pollinator rich habitat strips either by directly planting and/or sowing new meadows or by influencing others to do so.

Can you mention some of the places where the project has intervened? Could you list the main benefits for insects' populations you have observed until now?
Roughly two thirds of England has now been mapped along with a little of both Scotland and Wales. Most of the remaining B-Lines have seen some activity by partner organisations such as Wildlife Trusts and or individual land owners all of which are plotted onto the interactive B-Lines map. Already there is evidence of increased pollinator communities in and around the active B-Lines as well as a greatly enhanced flora. One partner the Yorkshire Arboretum has had such success with their meadow they have been able to harvest and sell seed.

B-lines is a large scale project, how do you ensure there is a continuity after the creation of wild-flower areas? Are public/private partners responsible to follow-up locally?
We ask all participants to guarantee a minimum of ten years' continuation for meadows we are involved in creating and do try to monitor areas created. We are currently developing an accreditation scheme to assure the quality of work undertaken at all levels. We encourage all participants to join in a regular dialogue to support learnings from the project.

B-lines also work in the farmed environment, how this initiative is being received by land managers?
Initially there was resistance in the farming communities to B-Lines development but as the project has grown so has the level of agricultural buy in as those participating have benefitted from higher yields due to increased pollination. The B-Lines are also carefully plotted to avoid taking in high grade agricultural land and we have been working with government to try and provide some grant support for putting land into the scheme We also have developed a B-Lines farm advisor post which is drawing up best practice guidance and en-

gaging directly with farmers in the south-east of England.

Based on your current experience, are you planning to export your idea to other countries?
Buglife are keen to roll out B-Lines across other countries. After all, bees do not stop at national borders. The interface between, for instance, Ireland and Northern Ireland is of high importance and we are hoping to begin mapping work in Northern Ireland during 2017.

How did you hear about the European Bee Award?
We saw some on-line publicity for the European Bee Award and thought that it was a great platform to promote B-Lines and also believe that winning the award will increase the political impetus and the landowner keenness to deliver more B-Lines.

Max BANNASKI is the founder and CEO of BB Umwelttechnik, the young company behind the "Double Knife system" mower project:

'Double knife system mower' is an innovative tool to harvest grassland and avoid damaging insects or amphibians seating on wild-flowers or grass. How this idea come up?
"As an enthusiastic organic farmer, I was looking for a more environmental friendly mowing technique, using a lighter farm machine tool which could be more gentle with insects seating on the grass". Since there was no suitable mower on the market, I decided to build up a mower based on my ideas.

What are the main advantages of using this system compared to conventional rotary mowers?
These double-blade mowers treat amphibians and insects with care during mowing operations. Compared to a rotary disc system, a double blade system, does not suck the insects. This mowing technique uses a scissor cuts system. Therefore, the cut grass falls behind and the insects seating on the plants can fly away without obstacles. This tool also reduces considerably fuel consumption and avoid soil compaction due to its lightness.

Can this tool be retro-fitted on existing mowing machinery? If so, what are the approximate costs?
For the moment the retrofitting of old mowers is not available.

Behind this technology there is an interest to reduce the impact of farming practices in pollinators, are you in contact with beekeepers' associations or local farmers to assess the impact of the tool in preserving pollinators?
I have got bees myself on my farm. And I am in touch with beekeepers to discuss how to engineer the perfect 'Double knife system mower' in order to preserve pollinators as much as possible. I think, for bee protection in mowing operations this system is nearly perfect.

Is this product already available on the market (as set-apart technology and/or integrated in new mowers)? If not, when do you plan to launch it? If yes, how many units have already been sold approximately?
Yes, these kinds of mowers have been on the market for two years already. In that period, we have delivered approximately 100 mowing systems in different European countries.

Do you believe public investment support schemes like the CAP Pillar 2 payments could be used to facilitate the uptake of such equipment?
Yes, of course. However, the funding should be significantly increased in order to further promote a sustainable agriculture. Local subsidy programs for this mowing technology, which are already available in various countries especially for areas of high ecologically conservation potential, clearly show that the number of double-blade mowers has risen significantly.

Based on your current experience, are you planning to export your technology to other countries? If so, which countries would be a priority?
More and more farmers from other countries are experiencing the benefits of this new system. We are very interested in exporting our mowers to other European countries. In the last season we have received many requests from Sweden, Denmark, the Netherlands, France, Hungary and of course Austria and Switzerland.

To learn more about the European Bee Award, visit: www.elo.org/awards/bee-award or contact the award coordinator at: ana.canomanuel@elo.org