



Mary Ann Doré, a seventh-generation dairy farmer, by her restored wetland on her farm in Wellington County. © DAIRY FARMERS OF CANADA

## Focus on biodiversity

We're working all the angles to support biodiversity in our communities. All of us who know waterfowl understand that biodiversity starts small — with the roots, seeds and insects that sustain birds and other wildlife through their life cycles. Healthy habitat is where it's at.

### Enhancing biodiversity on dairy farms

DUC is partnering with Dairy Farmers of Canada to integrate habitat stewardship planning on dairy farms. Research was commissioned from the University of Guelph to establish biodiversity benchmarks and identify ways to enhance farms with wetland and grassland restoration.

Hundreds of farmers participated and we learned that nearly one-quarter of farms have already established buffers to protect waterways and ponds. Looking ahead, DUC will collaborate with dairy farmers across the country to create habitat restoration programs that meet their needs.

*Support included the Canadian Agricultural Partnership, a five-year investment by Canada's governments in agriculture and agri-food sectors.*

### Eyes on biodiversity with microdrone technology

Last summer, we explored ways to improve our regional field programs using microdrones. These are small, inexpensive drones that substantially increase the efficiency of field activities. We looked at how drones can help with aerial monitoring, such as tracking invasive species and land management inspections, providing accurate data and powerful mapping outputs.

We confirmed that drones boosted productivity for our field staff because they can access habitat visually from a single point — even from a roadway adjacent to the habitat. Even better, the powerful camera allows us to study habitats from heights that substantially diminish any disturbances to wildlife.



### Habitat loss is the number one threat to reptiles

Road mortality is a key threat to snakes and turtles, but a study led by DUC research scientist James Paterson strongly indicates that habitat loss is the number one threat that limits where reptiles persist.

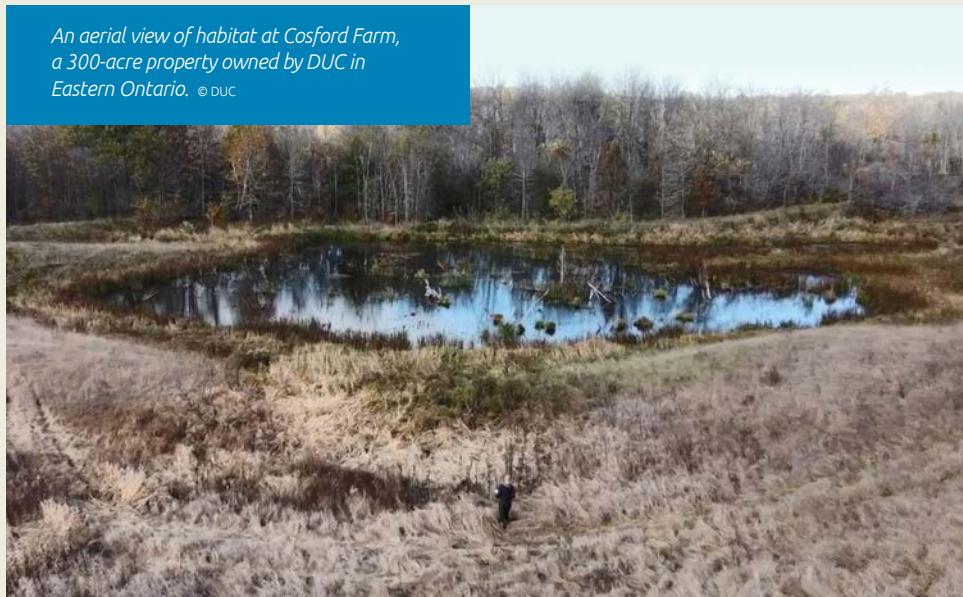
The project used data provided by thousands of community scientists who contributed observations to the *Ontario Reptile and Amphibian Atlas* to model occupancy of 22 reptile species (e.g., turtles, snakes, lizards) — including species-at-risk such as Blanding's turtle (above). Overall, habitat loss was a strong predictor of reptile occupancy with less evidence that road density or the coupling effects of habitat loss and road density reduced reptile occupancy in Ontario.

*Supported by the Liber Ero Fellowship Program, the Government of Ontario and the Government of Canada.*



Learn more: Individual and synergistic effects of habitat loss and roads on reptile occupancy

<https://t.co/XY5jTGUAwn>



An aerial view of habitat at Cosford Farm, a 300-acre property owned by DUC in Eastern Ontario. © DUC