



# Citizens help with automated recording units and camera traps to support conservation science and decision-making in Alberta

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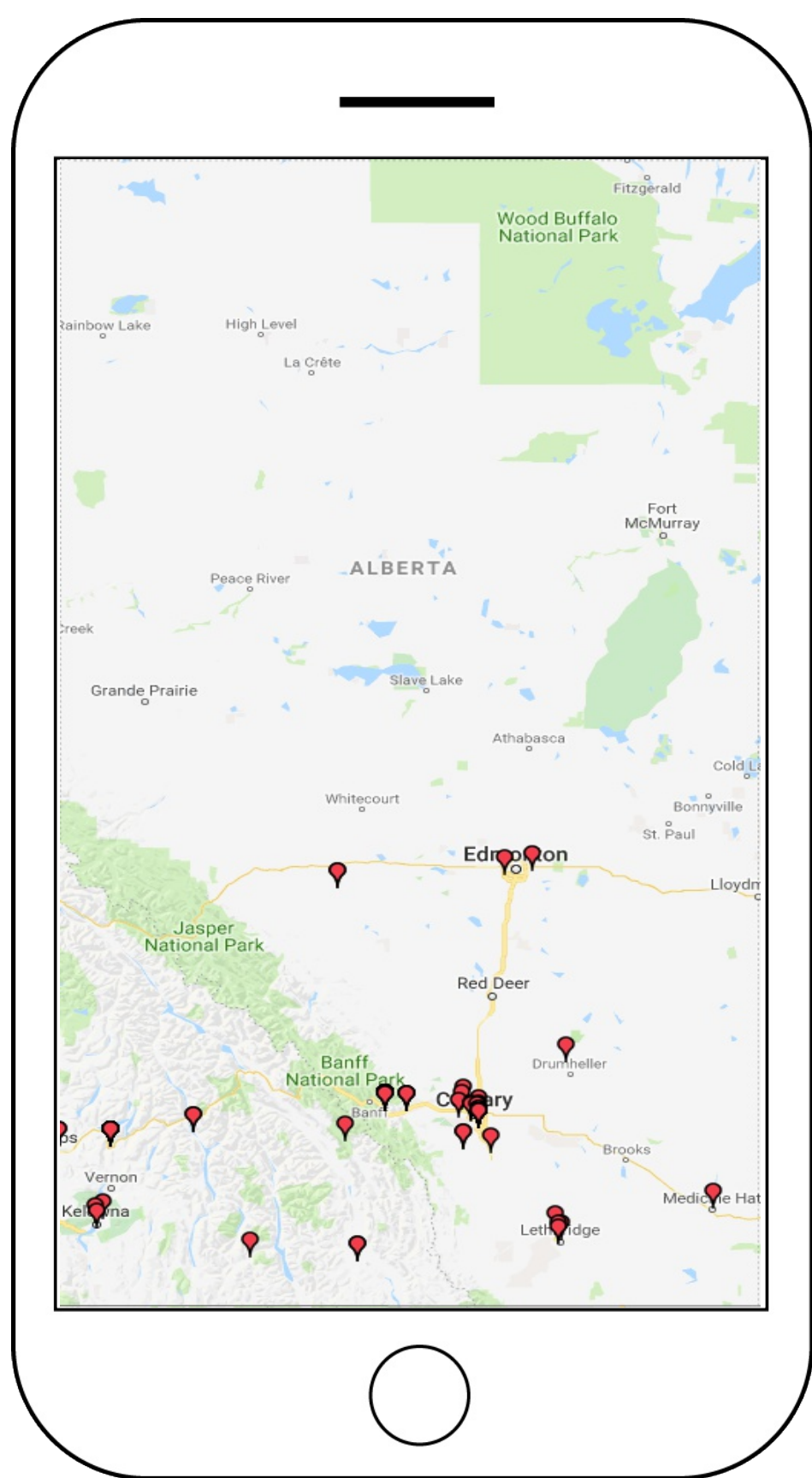
Citizen scientists can and have produced enormous amounts of data worldwide that are being used to address pressing conservation questions.

But not all citizen science data are created equal when it comes to estimating status and trend.

WildTrax is capable of storing data from citizen science projects, provide a standardized platform for computer aided and crowd sourced species identification.

It adds useful information on many species in Alberta benefiting conservation science and decision-making.

## Realities of presence-only data



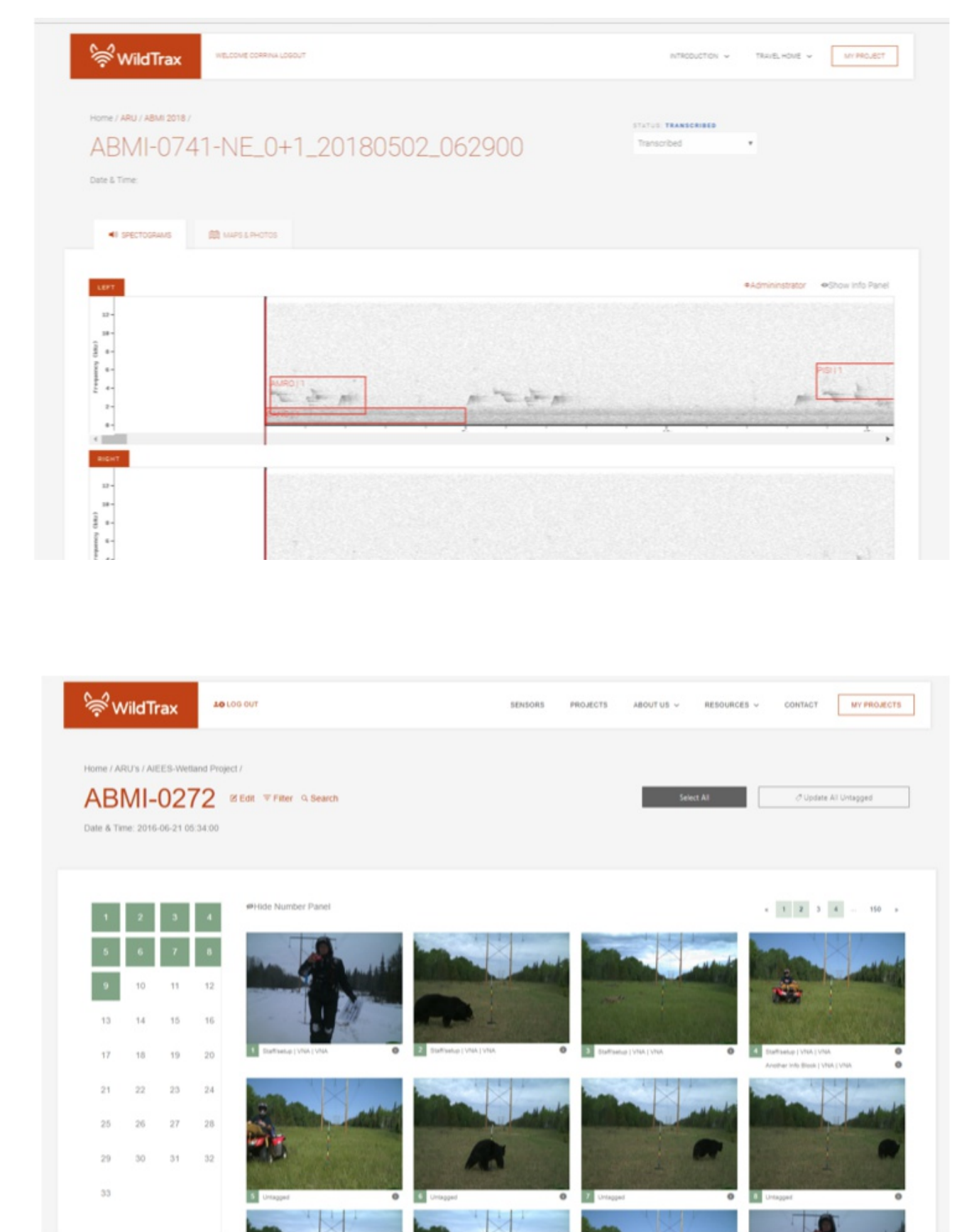
Data collection is opportunistic and accessibility-driven, reporting the interesting stuff, never the absence of something.

Knowing the locations or times when a species is not detected is valuable for scientific analyses: inform about baseline prevalences, and correct for sampling biases.

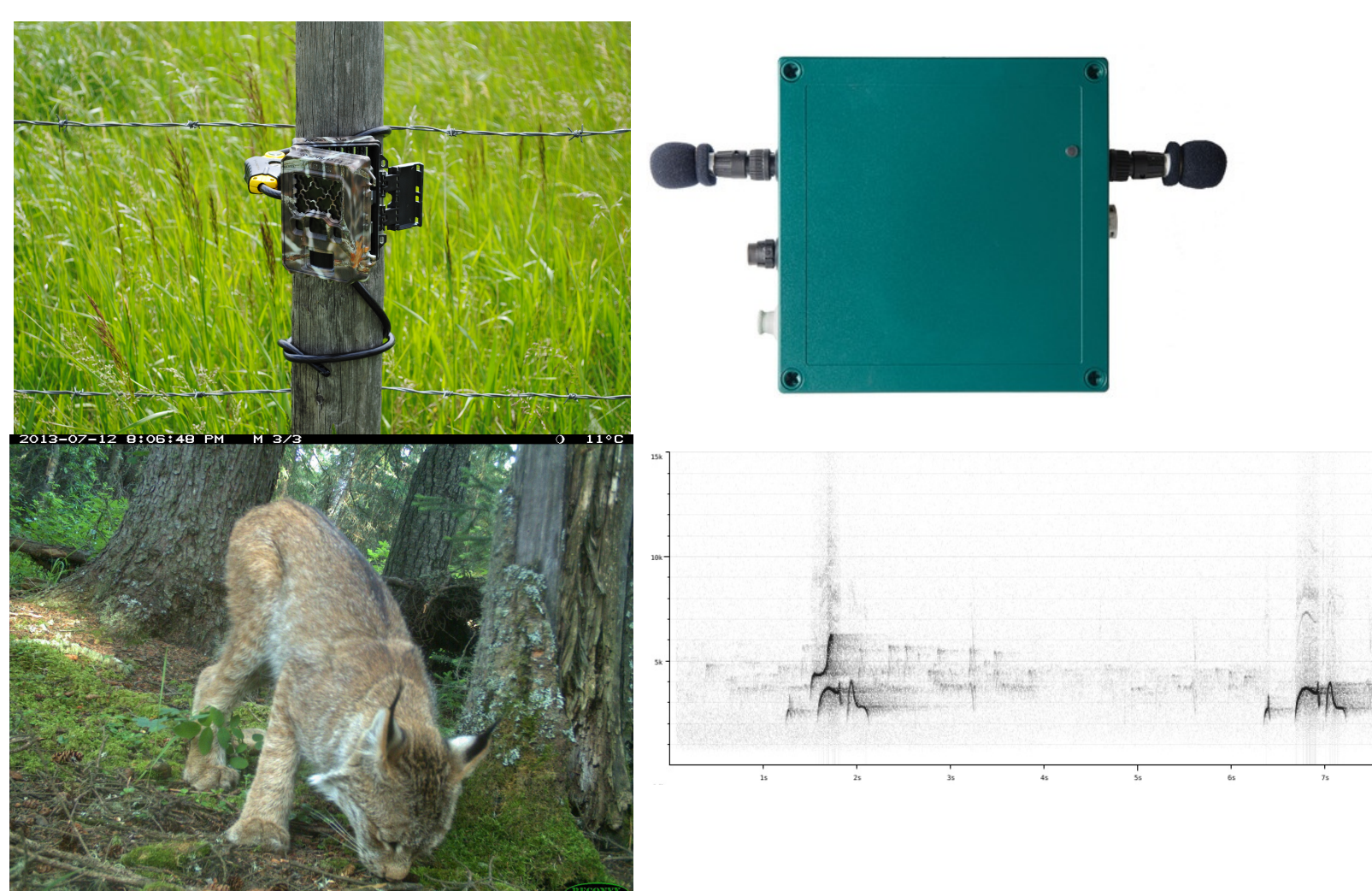
## WildTrax

WildTrax is a sensor network that allows users to centralize, store, manage and process their sensor data (cameras and recorders).

Citizen scientists can contribute through deployment and tagging.

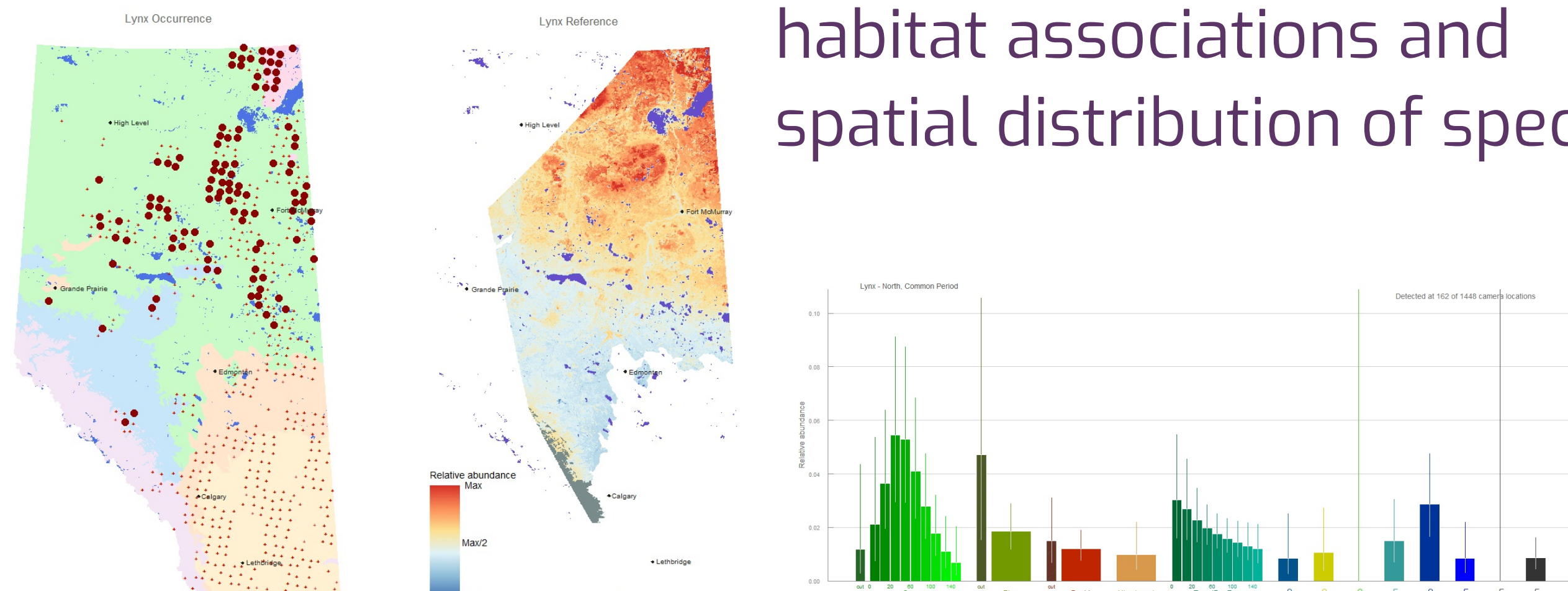


## Camera traps & recording units



ABMI collects data via automated recording units and camera traps that are deployed through the province each year.

The data are used to describe habitat associations and spatial distribution of species



## More data is better and here is why

Common species have more precise expected trend estimates, herding species have relatively lower precision, because a few sites can have very high densities.

Precise density estimates take 200-500 deployments for moderately rare species, and >1000 for rare species and species that occur in larger herds.

