(~1km and 5km). By placing transects along a major riparian corridor, we may detect differences in deer populations associated with this landscape feature and better understand its role in potential EHD outbreaks. Generally, Cass River had much greater deer abundance across the study area as compared to Maple River despite similar detection processes. This clear difference in deer populations will facilitate our ability to disentangle population level effects due to disease mortality, and will help demonstrate the utility of the field method under different population densities.

Objective 4. Evaluate the feasibility of using trained volunteers from the local community into a five year deer abundance monitoring plan.

Observers who participated in the surveys at both study sites included staff of the Department of Fisheries and Wildlife at Michigan State University, Michigan Department of Natural Resources (DNR) employees, and volunteers associated with the Maple River area deer cooperative, Thumb Area Branch Quality Deer Management Association members, and other volunteers recruited by local DNR field staff. Observers were briefly trained and provided equipment to record an angle and distance of each of the deer from the vehicle, the number, gender, and activity of observed deer, as well as the land-cover type where each deer was observed. We have had enough staff and volunteer support to conduct all transect routes simultaneously, but intend to grow our hunter-based volunteer network as this project continues into the future.

In the Maple River area, the cooperative with which the volunteers were associated has been in existence for many years. These individuals have a history of sharing harvest information and other deer observations and management goals, both among themselves (at meetings and through an annually mailed newsletter) and with DNR staff. No such organization exists immediately around the Cass River study area, so the contrast provided in this regard will aid us in more effectively evaluating the feasibility of using trained volunteers under differing local conditions.

Objective 5. Provide recommendations to aid future local population assessment methods, management decisions, and broader public communications regarding the local-scale response of deer populations to die-off events.