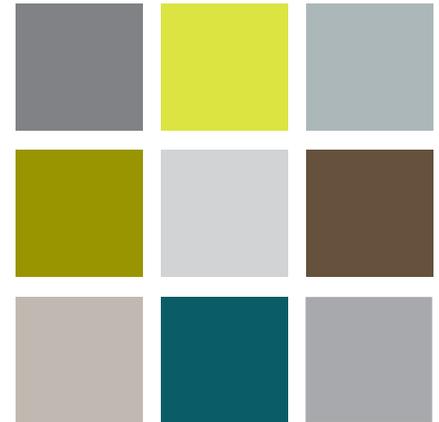# Development of New Deer Management Units in Ohio
Impact Statement

Photo credit: Jim Richardson-National Geographic

SUMMARY

We modeled antlerless deer harvest in Ohio and assisted the Ohio Division of Wildlife (ODW) in creating deer management units.

SITUATION

For decades, the ODW has considered each county to be a distinct management unit for white-tailed deer. However, political boundaries are meaningless for deer habitat, and their use as management units creates pressure on the ODW to collect county-specific information about hunter effort, harvest, and herd health, which is not currently possible given funding limitations. What is needed is a method for creating deer management units independent of arbitrary political boundaries based upon homogeneity (similarity) of habitat, and reducing the number of deer management units.

RESPONSE

We modeled antlerless harvest density at the county level in an effort to determine social and ecological factors that impact deer harvest and, in turn, deer populations. We used factors that were strongly associated with antlerless harvest density (e.g. percent landscape in farmland, percent farms in forested habitat, per capita

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deer permit sales) to group Ohio's 88 counties into internally-homogenous clusters. The clusters of counties represent six regions, each encompassing 5 to 35 counties. To replace county lines as the dividing boundaries between Deer Management Unit (DMU) regions, we used physical and easily identifiable boundaries (interstates, US routes, OH routes, rivers—ranked in order of priority) to form actual DMU region boundaries.

IMPACT

The ODW is currently working to adopt our study recommendations and change DMU regions.

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