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POSTER

Climate change and duck population dynamics

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The likely effects of climate change on avian vital rates are relatively well studied, although mostly in cavity-nesting passerines. As important quarry species and as flagships for wetland conservation, ducks (Anatidae) have been widely studied for many other reasons, yet no general review of the effects of climate change on these birds has been produced to date. This study reviews what is known about the general consequences of climate change for birds in general, and highlights gaps in knowledge concerning ducks specifically. The relatively few duck studies to date have generally demonstrated changes in migration phenology and migration distances that are consistent with an effect of global climate warming. Some such changes were associated with changes in survival and breeding success, and hence limited evidence suggests climate change may affect individual fitness and thus population dynamics in ducks. Unfortunately, most climate change studies in ducks were restricted to a few species, especially Mallard *Anas platyrhynchos* and Common Eider *Somateria mollissima*, and hence the generality of these results still remains to be demonstrated. A range of suggestions are made to improve our ability to track the possible effects of climate change in ducks, such as expanding the range of duck monitoring schemes and increasing the number and extent of individual marking schemes and the use of electronic devices. Regardless, duck populations should be better studied in the face of environmental change if they are to be effectively managed at the flyway scale in the future.