1. The main objective of the study is to test how birds are affected by migratory location in terms of costs, beneﬁts, and ﬁtness consequences.
2. variables

* net energy input- amount of energy consumed by an organism,
* energy thermoregulatory costs- the loss of something due to maintaining heat in the body,
* migratory performance- ability to move effectively in an amount of time,
* annual survival rates- amount of individuals that survive yearly
* probability of breeding

1. Many species show a strong preference as to where they migrate to. The range size, demography, and population dynamics of migratory species can be strongly inﬂuenced by winter site selection and the subsequent environmental conditions.
2. 3 thing that relate to lab or lecture-

* Discussion of migration in class
* We discussed what BMR (Basal Metabolic Rate) is
* We discussed the scientific method

1. Thermoregulatory-regulate temperature, especially one's own body temperature. Diurnal- of or during the day. Daily
2. Stated main objective- “The consequences of wintering in different locations were then assessed by relating these energy trade-offs to individuals’ migratory performance, annual survival rates at these locations, and to their probability of breeding in areas colonized at different periods during the population expansion” Uses information directly related to the study- ex. “we ﬁrst quantiﬁed the net energy input for Icelandic godwits wintering in three different locations that encompass the entire range and, between them, support” Review of current knowledge- “For many migratory species, distribution ranges span large geographic areas, encompassing very different environmental conditions (Newton 2008). Large-scale variation in local weather conditions (Castro et al. 1992, Ho¨ tker 2002) and in the quality and quantity of food resources (van Gils et al. 2005, Mathot et al. 2007) can result in differing energy costs and beneﬁts across the range”