

become sensitive to blue light (from the sky) when it's time for takeoff on their big journey, and sensitive to yellow light (reflected from tender young leaves) when it's appropriate to land. Birds will fatten themselves with heavy feeding in advance of a long migrational flight. The value of his definition, Dingle argues, is that it focuses attention on what the phenomenon of wildebeest migration shares with the phenomenon of the aphids, and therefore helps guide researchers towards understanding how evolution has produced them all.

Human behaviour, however, is having a detrimental impact on animal migration. The pronghorn, which resembles an antelope, though they are unrelated, is the fastest land mammal of the New World. One population, which spends the summer in the mountainous Grand Teton National Park of the western USA, follows a narrow route from its summer range in the mountains, across a river, and down onto the plains. Here they wait out the frozen months, feeding mainly on sagebrush blown clear of snow. These pronghorn are notable for the invariance of their migration route and the severity of its constriction at three bottlenecks. If they can't pass through each of the three during their spring migration, they can't reach their bounty of summer grazing; if they can't

pass through again in autumn, escaping south onto those windblown plains, they are likely to die trying to overwinter in the deep snow. Pronghorn, dependent on distance vision and speed to keep safe from predators, traverse high, open shoulders of land, where they can see and run. At one of the bottlenecks, forested hills rise to form a V, leaving a corridor of open ground only about 150 metres wide, filled with private homes. Increasing development is leading toward a crisis for the pronghorn, threatening to choke off their passageway.

Conservation scientists, along with some biologists and land managers within the USA's National Park Service and other agencies, are now working to preserve migrational behaviours, not just species and habitats. A National Forest has recognised the path of the pronghorn, much of which passes across its land, as a protected migration corridor. But neither the Forest Service nor the Park Service can control what happens on private land at a bottleneck. And with certain other migrating species, the challenge is complicated further – by vastly greater distances traversed, more jurisdictions, more borders, more dangers along the way. We will require wisdom and resoluteness to ensure that migrating species can continue their journeying a while longer.