## Conservation of wild Japanese squirrels in the forests of Nagoya City

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## 1. Method

Moriyama Wild Japanese Squirrel Conservation Society established in 1990 started in-situ conservation of squirrel and flying squirrels in forests by restoring habitat and collaborating with Higashiyama Zoo and Nagoya University. Our activities are (1) feeding squirrels with Japanese walnuts, since Japanese red pine were killed by the pinewood nematode, (2) planting resistant red pine, Japanese walnut with Owaribe Shinto Shrine and Forest-park Golf Company and (3) studying behaviour by radio-telemetry and heat sensing digital cameras.

Education for children is also an important component to conserve the mammals of Mt. Togoku. During the activities, (1) measuring the amount of water from the spring, (2) recording the diameter at breast height (DBH) of the trees, (3) counting the remaining walnuts and resupplying stations, (4) learning how to measure the diameter of nuts by slide caliper, and (5) exchanging SD cards in cameras, are accomplished by children.

## 2. Results

Through our activities, 10 to 20 squirrels have constantly been maintained in the area of Mt. Togoku. We

found that young squirrels (1 to 2 years old) dispersed to other territories to bequeath their space to the newly born babies after weaning and fledging. We also found that dispersing individuals moved to the neighbouring Forest Park Golf Course (281ha) and the forest park itself (107ha). We estimated that 30 to 60 squirrels could inhabit these forests without extinction for more than 20 years.

## 3. Future Plan

A municipal road between Mt. Togoku and the golf course is under construction to widen from 6m to 16m. This may impede the squirrel migration to neighbouring forests and increase the possibility of traffic accidents. We proposed to construct animal crossings including squirrel bridges and tunnels for animals and insects. When animal crossings has been scheduled for construction, we will discuss strategies to save animal life by a green corridor.

The forest in golf course is becoming a key place to conserve various endangered species in Japan. We will continue collaborating with the University and the golf company to create corridors by planting pine and walnut trees.