

Changing Populations

Eastern Bluebird (*Sialia sialis*)

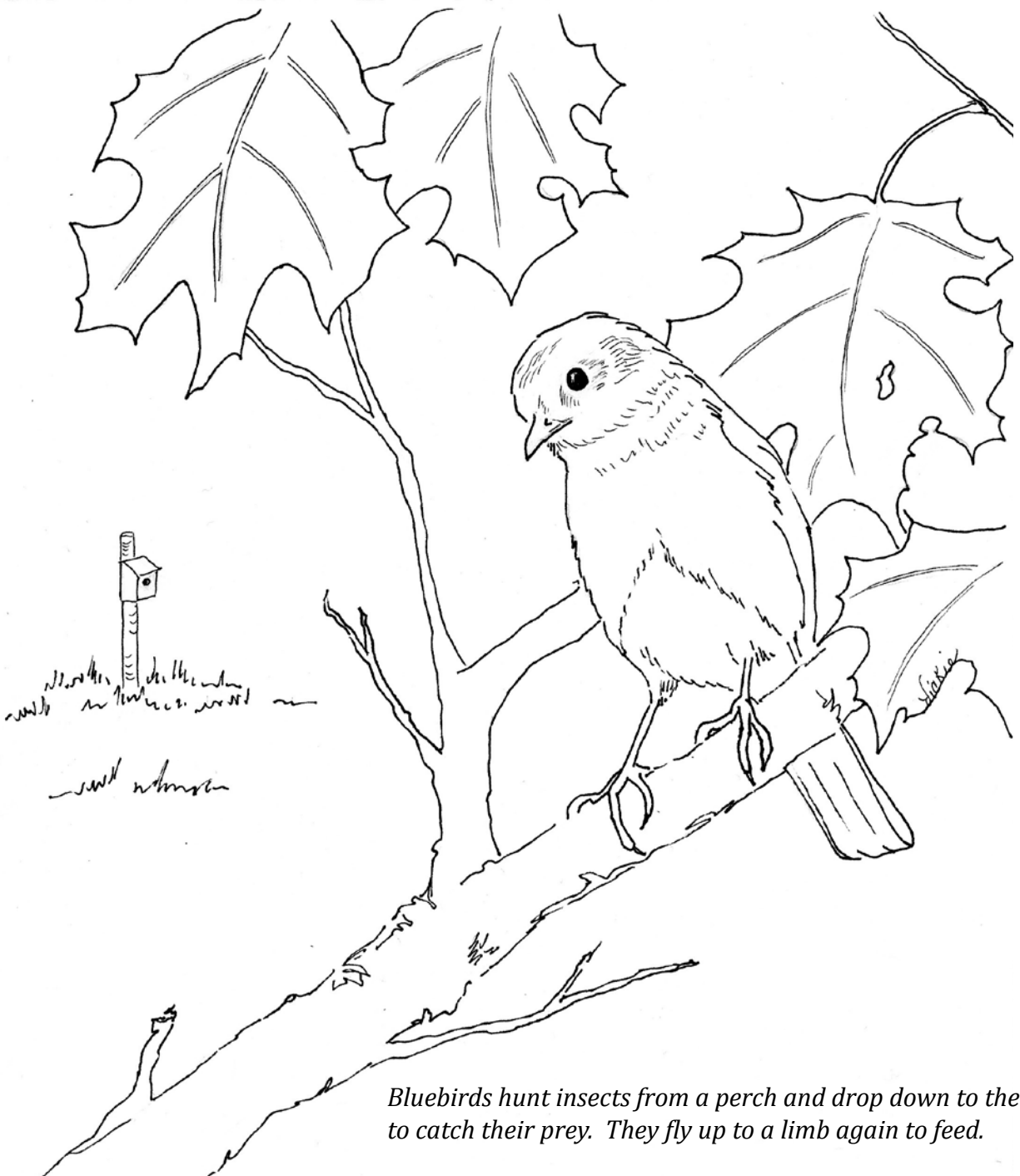
This is the beautiful blue bird you see on Watchable Wildlife license plates in Tennessee. They are year-round residents here.

Habitat: Bluebirds like open habitats without much groundcover such as orchards, open woodlands, parks, and lawns in suburban and rural areas.

Food: Insects and small fruits

Nesting: Bluebirds are cavity nesters, meaning they nest in holes in trees. Nest boxes are a substitute for tree holes, and bluebirds make good use of them. Young leave the nest after 15-18 days.

Conservation considerations: Bluebirds must compete with European Starlings and House Sparrows for available nest sites.



Bluebirds hunt insects from a perch and drop down to the ground to catch their prey. They fly up to a limb again to feed.

Changing Populations

Wild Turkey (*Meleagris gallopavo*)

Turkeys are the largest bird that nests in Tennessee. They spend a lot of time on the ground, but they can fly. They roost in trees at night. Turkeys are often hunted.

Wild Turkey do not grow down feathers. Instead, they have a second feather that grows on the feather shaft. This feather is called an after-shaft feather and may help keep the turkey warm.

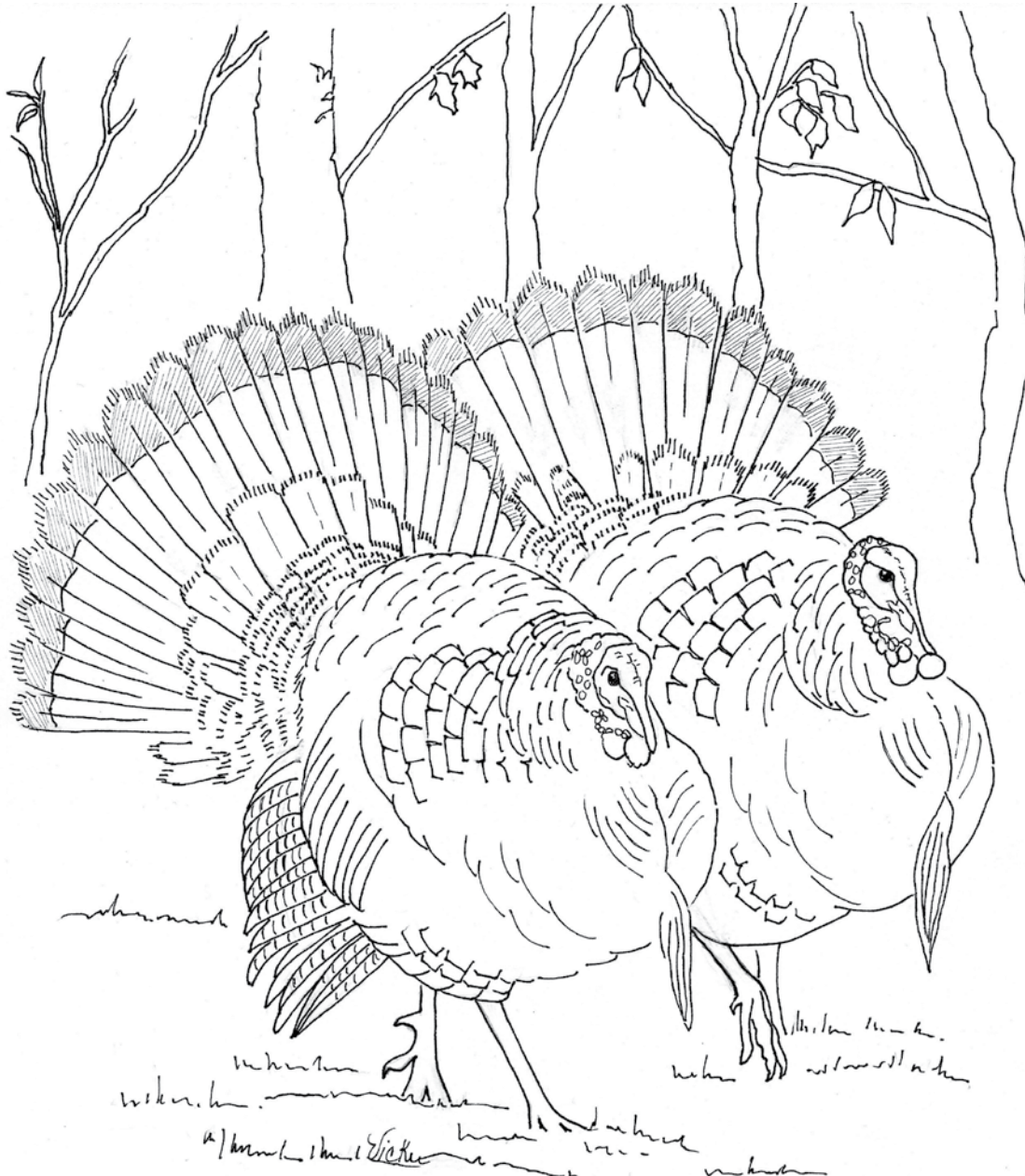


Habitat: Mature woodlands with scattered openings or fields.

Food: Acorns, nuts, seeds, fruits, and insects.

Nesting: Turkeys nest on the ground where they lay 7-14 eggs. The chicks leave the nest shortly after hatching.

Conservation considerations: Over-hunting eliminated turkeys from much of their range in the early 1900s, but modern wildlife management has allowed populations to bounce back throughout Tennessee.



Changing Populations

Ornithologists, people who study birds, count birds to learn how populations are changing. If numbers of a species are going down, ornithologists want to know why. If they can figure out why, it may be possible to solve problems before a species disappears.

The United States Department of the Interior has coordinated Breeding Bird Surveys (BBS) all across the United States, including Tennessee, since 1966. Counters cover a 24.5-mile route, stopping to record all the birds they see or hear for 3 minutes every half mile. The table below shows the number of individuals counted in Tennessee for three species, the Eastern Bluebird, Northern Bobwhite, and Wild Turkey, from 1970-2010.

A good place to look for more information on birds is the Tennessee Wildlife Resources Agency's Tennessee's Watchable Wildlife website (<http://www.tnwatchablewildlife.org/birds.cfm>).

Table 1. Counts of individuals of three species recorded on BBS routes in Tennessee from 1970-2010

Year	# of routes	Bird Species		
		Eastern Bluebird	Northern Bobwhite	Wild Turkey
1970	40	200	1200	0
1975	42	300	1200	0
1980	42	125	1150	0
1985	42	250	900	0
1990	39	425	700	0
1995	40	450	500	0
2000	37	575	300	17
2005	41	675	250	52
2010	38	500	150	50
Total	361	3500	6350	119

Data from USGS BBS, November 2012 (<https://www.pwrc.usgs.gov/bbs/>)
Numbers in the count have been rounded off.



Northern Bobwhite (*Colinus virginianus*)

The bobwhite was named for its loud whistled “bob-white” call. Bobwhites are non-migratory. These small chicken-like birds are a popular game bird and are hunted, like the wild turkey.

Habitat: Native grasslands interspersed with dense thickets near woodlands.

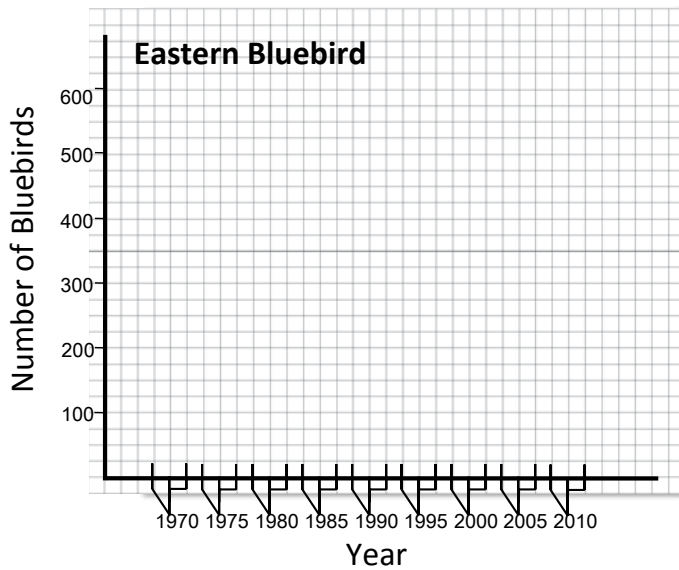
Food: They eat seeds and insects, mostly seeds in winter, and mostly insects in summer while raising young.

Nesting: Bobwhites nest on the ground where they usually lay 12-16 eggs. The chicks leave the nest within one or two days of hatching and can feed themselves.

Conservation considerations: Declining numbers may be due to succession of grasslands and farmlands to forest and changes in agricultural practices.

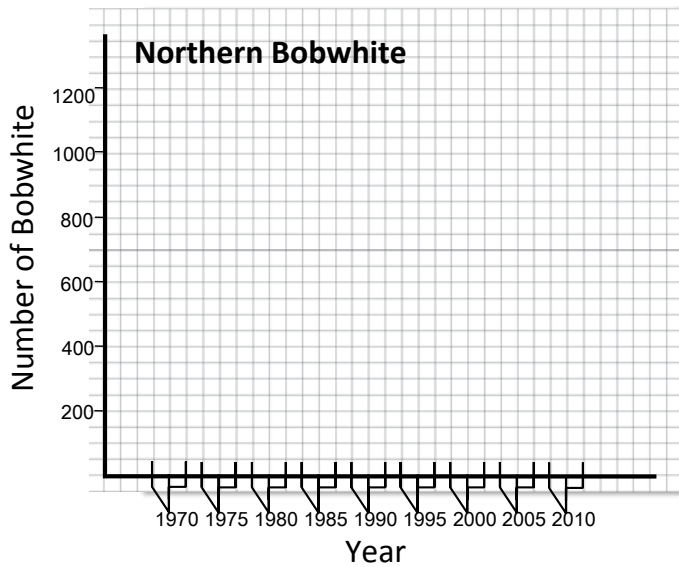
Changing Populations

Make **bar graphs** to represent the counts for each species to see how populations have changed from 1970-2010.



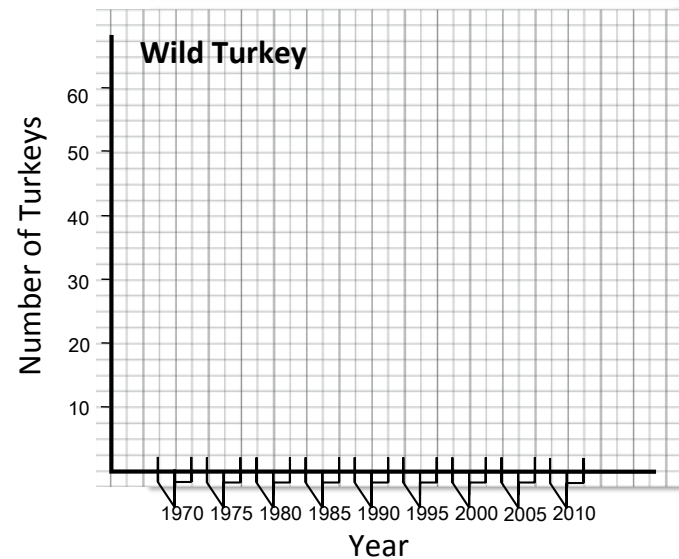
Describe how the number of Eastern Bluebirds has changed over time:

What might have caused this change in Eastern Bluebirds?



Describe how the number of Northern Bobwhites has changed over time:

What might have caused this change in Northern Bobwhites?



Describe how the number of Wild Turkeys has changed over time:

What might have caused this change in Wild Turkeys?