

11 September 2016

Dear David, Marc and Sandra,

Here is our 2016 Colby Hill Ecological Project letter summarizing the data on bird abundance and distribution along the transect that runs along the old road northwesterly from the northwestern end of the large Guthrie-Bancroft field through mixed northern hardwoods to Route 17. 2016's data are attached.

Barry and I use the 10-minute point count protocol adopted by the Vermont Center for Ecostudies (VCE) for their Forest Bird Monitoring Program (FBMP). This was our 19<sup>th</sup> year of CHEP and the 19<sup>th</sup> year of our participation in the FBMP. For the last two years VCE biologist Steve Faccio has been undertaking an intensive analysis of 18 to 25 years of data from the 31 protected forest tracts in the FBMP across Vermont as a complement to the national Breeding Bird Survey and other bird population assessments which capture abundance close to roads but not forest interiors. Steve Faccio's analysis will be released sometime this year. He has provided some preliminary trend data already, which I will discuss later in my report.

My increasing inability to hear many bird songs, even with hearing aids in both ears, has limited my participation to one of passive cheerleader. Barry has been doing the identifying and mapping for a decade now or longer, and she would like to continue. She would appreciate the participation of another birder when I'm not able to fill that role. We invited Chris Runcie of Starksboro to join us again this year, but Chris was traveling during the period of our monitoring. Although Chris enjoyed the experience last year and would like to continue her participation when possible, she was unwilling make a more permanent commitment.

As we have all years since the first two, we started at point 5, the lowest point, not point 1, the highest. Start time has continued to be 5 am, give or take ten minutes. We return to the car by about 7 am.

The dates of our 2016 monitoring were 3 June and 15 June, within the recommended two-week window. Both days were cool and clear with little wind, if any.

We recorded 24 species in 2016, 21 in the first session, 19 in the second, 16 in both sessions. We recorded 23 species in 2015, 19 in the first session, 16 in the second, 12 in both sessions. We had 22 species in 2014, 21 in 2013 and 22 in 2012, all except this year slightly below the 19-year average of 23. A few more species are seen on the first session than on the second session as a rule.

We recorded two species new to the study this year, so the total for the transect is now 48 species. The first new species, Black and White Warbler, was heard at point 1. It is surprising that we have not heard this species' distinctive "squeaky wheel" song previously along the transect. It is among the earliest spring arrivals and may have reduced its singing by the time our first monitoring takes place.

The second new species, Wild Turkey, was heard before seen. We flushed two birds that were roosting in the canopy directly over the trail at point 4, and after a minute or two three more birds flushed that had been roosting quite nearby, clearly all part of the same flock. They made quite a racket as they thrashed through the canopy in their effort to become airborne.

Six species have been recorded at least once every year of the study: Yellow-bellied Sapsucker, Eastern Wood Pewee, Veery, Red-eyed Vireo, Black-throated Blue Warbler and Ovenbird.

Some species occur disproportionately often at certain points and seldom or not at all at others. Although the forest along the transect appears rather uniform, there are subtle differences in the age of trees, in the density of the understory and the midstory, in slope, in soil moisture and soil pH, and doubtless other aspects of forest ecology that my eyes aren't picking up. And, of course, the elevation decreases modestly from point 1 at ca. 1280 feet to point 5 at ca. 800 feet.

These species select or avoid certain points:

Yellow-bellied Sapsucker:	Significantly fewer records at point 4, but one in 2016
Pileated Woodpecker:	Seen or heard 6 times, half at point 3, one third at point 4
Eastern Wood Pewee:	One record at point 1, 25 records at point 5, the only species most abundant at point 5.
Least Flycatcher:	No records at point 1, 12 at point 3.
Black-capped Chickadee:	Two records at point 3, 3 records at point 4, 20 records at point 1.
Brown Creeper:	Only records at points 1 and 2. None since 2008
Winter Wren:	No records at point 5, 6 at point 1
Veery:	Most records at point 3, the driest, most mature forest.
Hermit Thrush:	Fewest records at point 3.
Black-throated Blue Warbler:	Records increase with elevation from 3 at point 5 to 21 at point 1.
American Redstart:	Twenty-two records at point 3, 1 each at points 1 and 5.
Yellow-rumped Warbler	Three records in 19 years, of which 2 in 2016.

Rose-breasted Grosbeak: Most records at point 3, decreasing at points 2 and 4 and fewest at points 1 and 5.

The following have dropped off the list of species active along the transect:

Great Crested Flycatcher: Last recorded in 2006 and 2013.  
Brown Creeper: Last recorded 2008.  
Canada Warbler: Last recorded 2008, only found at point 1, close to a shrubby wooded wetland from which territorial singing took place.  
White-throated Sparrow: Last recorded 2011, only from point 1.

The Vermont Center for Ecostudies' conservation biologist, Steve Faccio, released a preliminary report in the spring of 2016 on 25 years of data from the 31 Forest Bird Monitoring Program sites around Vermont.

These sites are all interior, unmanaged mature sites, including the Guthrie-Bancroft Tract, which we monitor. The data show significant declines in 13 species (38%), increases in 8 species (24%), and no significant trend in 13 species. Within 13 ecological groups seven groups declined and two increased. Our data fall largely along these same lines. Among those that increased, Ovenbird, Red-eyed Vireo and Yellow-bellied Sapsucker have been recorded every year on our transect. The fourth, Black-throated Green Warbler, has only been missed twice, including in 2016. Among the decliners are Eastern Wood Pewee and Great Crested Flycatcher, both members of the aerial insectivore guild that is one of the ecological groups that have declined significantly. Declines were noted for Winter Wren, Veery, Black-throated Blue Warbler, Canada Warbler and White-throated Sparrow. Our data agree with these declines.

The final report should be released later this year. Our next year's summary will look into the statewide data analysis more closely.

We're pleased that CHEP continues the work for which Lester and Monique provided the inspiration. We're looking forward to bird monitoring in 2017.

Best regards,

Warren King

Cc: Chris Runcie