



GPS tracks of 17 Bicknell's Thrushes tagged during the breeding season of 2021. Orange lines represent male Mt. Mansfield birds, white lines female Mt. Mansfield birds, and blue lines BITH tagged in Quebec. All but two birds overwintered in the Dominican Republic; one individual made its winter home in Cuba's Sierra Maestra, and one is thought to have overwintered in northwestern Haiti. Note that the lines approximate actual migratory pathways.

# Tracking Bicknell's Thrushes Across the Hemisphere

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**Backpack-toting BITH offer insights into overwintering birds' whereabouts.**

BY CHRIS RIMMER

**A**fter a suspenseful winter during which VCE biologists apprehensively brooded over the fate of 50 Bicknell's Thrushes fitted last summer with miniature GPS tags, male #2821-79231 prompted a whoop of joy on the Mt. Mansfield ridgeline at 8:45 pm this past 31 May. The bird's historic mist net recovery brought elation and relief to us banders. Banded as a yearling on 6 July 2021 and fitted with GPS tag #50463, the returnee was in robust condition, weighing in at 28.8 g. We snipped off his GPS backpack, gingerly replaced it with a new one, and sent him on his way. VCE Staff Biologist Kevin Tolan immediately connected the tag to his laptop and confirmed that the unit had recorded >50 GPS "fixes" (precise locations that we had programmed in advance).

After closing nets at noon the following day, we were nearly giddy, having retrieved another four backpacks. Year two of our three-year study had

begun with a flourish—six weeks later, eight additional Mansfield birds had furnished their precious tags. Meanwhile, our Canadian colleague Yves Aubry retrieved another four tags from the 14 males he had tagged in Quebec. This recovery rate of 34% exceeded our nervous expectations!

Preliminary data from 17 birds (14 males, 3 females) provide unprecedented insights into BITH's precise non-breeding season movements and locations. The overall pattern confirms that overwintering birds are highly concentrated in the Dominican Republic; 15 settled there, while one male overwintered in northern Haiti and a female in eastern Cuba's Sierra Maestra. Further, it appears that the mid- to late-winter intratropical migrations we suspected did not occur. Only four birds (three males and the Cuba female) showed notable movements from their discrete early winter territories, and

## NEW FACES AT VCE

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three of these didn't move until late April or early May, at which point their GPS batteries died. These were likely pre-migratory dispersals.

One female deserves special mention: #2821-79107 behaved like most of the other 16 BITH we tracked. She overwintered in the Dominican Republic's Cordillera Central, approximately 4 km east of the island's (and the Caribbean's) highest peak, Pico Duarte (3,087 m). She was among the most sedentary of the birds we tracked, having settled on her winter territory by 1 November and remained at least until 3 May, when her GPS battery died. She also claimed honors as the highest-altitude BITH ever documented on the planet; her winter territory of 6+ months occupied a patch of cloud forest between 2,460 and 2,665 m in elevation!

Research excitement aside, we've gained a newfound respect for backpack-toting BITH. Consider female #2821-79107: she spent four months in Mansfield's fir forests to raise a brood, underwent her energy-intensive annual molt, prepared for and then navigated the arduous southward migration, inhabited a patch of Dominican cloud forest at an altitude of 2,500 m for six months, then winged her way back north to the very same patch of Vermont montane forest to begin the cycle again!

We eagerly await our 2023 field season, when we fully expect to intercept several of the 20 BITH we tagged this summer, 11 of them birds who returned their 2021 backpacks. It will be fascinating to compare individual movements between years. **FN**



**ALEXANDRA JOHNSON**

### **Communications Assistant**

This summer, our communications team welcomed Alex Johnson as VCE's first-ever Communications Assistant. Alex completed her bachelor's degree in conservation biology at SUNY-ESF and spent several years afterward assisting with field research across the U.S. She is currently finishing a master's degree in journalism at Boston University. Alex's passion for sharing the process of ecology with a broad audience is already boosting VCE's social media presence and helping us develop long-term communications plans. We can't wait to see what she contributes next!



**DESIREE NARANGO**

### **Conservation Biologist**

We are pleased to introduce our newest Conservation Biologist, Desiree Narango. Desiree joined us after completing the David H. Smith Conservation Research Fellowship at the University of Massachusetts Amherst, where she studied habitat quality and species interactions of migratory birds and insects in urban forests. She received her Ph.D. in Entomology and Wildlife Ecology from the University of Delaware where she investigated the impacts of nonnative plants on food webs. Desiree brings a holistic, interdisciplinary approach to applied ecological research and a robust science communication record. Desiree is a tremendous addition to our team, and we couldn't be happier to welcome her aboard!



**DAN LAMBERT**

### **Associate Director**

Last but certainly not least, we are pleased to welcome Dan Lambert to VCE's leadership team as Associate Director. Dan's educational background (MS in ecology and environmental biology from the University of Alberta and BA in environmental education from Dartmouth College) led to a 20+ year career in ornithology, conservation science, conservation planning, and education. Dan previously held positions at American Bird Conservancy, the Vermont Institute of Natural Science, and High Branch Conservation Services. In 2001, he expanded the Vermont Forest Bird Monitoring Program's high-elevation survey routes into one of VCE's flagship programs, Mountain Birdwatch. His most recent post was at the Center for Northern Woodlands Education, where he served as the associate director. Please join us in welcoming Dan to our team! **FN**