

2004 - 2005 Report to the Vermont Monitoring Cooperative

**Part I. Demographic Monitoring of Montane Forest Birds
on Mt. Mansfield**

**Part II. Forest Bird Surveys on Mt. Mansfield
and Lye Brook Wilderness Area**

VINS Technical Report 05-02

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Bicknell's Thrush by Barry Kent Mackay

Part I. Demographic Monitoring of Montane Forest Birds on Mt. Mansfield

Christopher C. Rimmer and Kent P. McFarland

We continued demographic monitoring and mercury sampling of Bicknell's Thrush (*Catharus bicknelli*), Blackpoll Warbler (*Dendroica striata*), and Yellow-rumped (Myrtle) Warbler (*Dendroica coronata*) on the Mt. Mansfield ridgeline in 2004 and 2005, completing our 14th consecutive field season. This report presents a summary of data collected during these two years.

Methods

We used mist-netting and banding to sample breeding populations of Bicknell's Thrush, Blackpoll Warbler, and Yellow-rumped Warbler on an established study plot on the Mt. Mansfield ridgeline between c. 1155-1190 m (3800-3900 ft) elevation. We conducted 3 banding sessions in 2004 (3-4 June, 12-13 June, and 1-2 September) and three sessions in 2005 (9-10 June, 30 June – 1 July and 11-12 July), using 12-18 nylon mist nets (12 x 2.5-m and 6 x 2.5-m, 36-mm mesh) placed at sites that have been used annually since 1992, primarily on the Amherst, Lakeview, and Long trails. Nets were generally opened from late afternoon until dusk and from dawn until early afternoon on the following morning. Bicknell's Thrushes were captured both passively and through the use of vocal lures (tape recorded playbacks), while all warblers were passively captured. Each individual was fitted with a uniquely-numbered U.S. Fish and Wildlife Service leg band and a unique combination of 3 plastic colored leg bands. We recorded data on age, sex, breeding condition, fat class, ectoparasites, flight feather wear, and net site of capture. Standard morphometrics included wing chord, tail length, weight, tarsal length, culmen length, bill length from mid-nares, bill width, and bill depth. We collected a small blood sample (c. 50 μ l) from the brachial vein of all adult Bicknell's Thrushes for mercury analysis. Each sample was stored in a heparinized capillary tube, refrigerated in a vacutainer in the field, and frozen within 12-48 hours. The fifth secondaries on both wings were clipped just above the follicle and stored in plasticine envelopes for mercury analysis. We also collected the fifth tail feather on both sides for stable isotope and trace element analysis to track natal dispersal and population connectivity.

Results and Discussion

We captured 9 Bicknell's Thrushes in 2004 and 14 individuals in 2005 (Appendix A). Only 4 birds captured in 2004 (40%) were one year old (yearling) individuals, while 10 (71%) birds captured in 2005 were from this age class, possibly indicating an exceptionally productive 2004 breeding season. Seven of the two year or older individuals in both years had been captured on the Mansfield ridgeline in at least one previous summer. One male recaptured in 2004 was ≥ 6 years old, while a female originally banded in 1997 but unrecorded in 1998-2000 was recaptured for a fourth consecutive year in 2004, at a minimum age of ≥ 7 years. Neither of these individuals was recaptured in 2005.

These results highlight both the high survivorship and strong breeding site fidelity of adult Bicknell's Thrushes, as well as the difficulty of obtaining complete population samples in a given year. It is clear that multiple-year sampling is necessary to obtain accurate demographic data for individual birds. The difficulty of intensively sampling all montane forest habitat on this study plot, due to constraints of terrain, accessibility and weather, undoubtedly causes a significant portion of the breeding population to go undetected each year. This may be particularly true for females, with their smaller home ranges and more limited movements than males (cf Rimmer et al. 2001).

We have completed a detailed analysis of Bicknell's Thrush survivorship using data collected through 2003 that include Mt. Mansfield and Stratton Mountain (Rimmer et al. 2004). This and other demographic analyses from years prior to 2004 can be reviewed in our report, which is available online at <http://www.vinsweb.org/assets/pdf/ORDA2004.pdf>.

We obtained blood and feather samples from all Bicknell's Thrushes for ongoing mercury analyses in both 2004 and 2005. Our mercury data through 2004 have been analyzed and reported in the peer-reviewed journal *Ecotoxicology* (Rimmer et al. 2005). This paper can be viewed online at <http://www.springerlink.com/media/m1b6vnlvvr7u1114fatn/contributions/j/g/4/t/jg4tu3t421185k72.pdf> or <http://www.vinsweb.org/assets/pdf/songbirdHg.pdf>. Our 2005 samples currently await analysis at the University of Texas A&M Trace Element Research Laboratory.

Perhaps our most significant discovery has been documenting the pervasiveness of mercury burdens in terrestrial montane songbirds. We sampled 4 species (Bicknell's Thrush, Blackpoll Warbler, Yellow-rumped Warbler, and White-throated Sparrow [*Zonotrichia albicollis*]) on the Mansfield ridgeline in 2000-2004, and we documented mercury in every individual sampled (n = 91 individuals). Our data on Bicknell's Thrush provide the most comprehensive information available on mercury in a strictly terrestrial, insectivorous songbird. The results from our study indicate that songbirds in montane forests are bioaccumulating mercury, nearly 100% of which is sequestered in the toxic methylmercury form. Among the four species we sampled on Mt. Mansfield, blood mercury concentrations were highest in Bicknell's Thrush (0.08 to 0.38 ppm). Feather mercury levels were highest in Bicknell's Thrush older than two years, further suggesting that mercury in this species builds up over time. These results, which indicate that mercury is accumulating in food webs within high elevation forest environments, have come as a surprise to many ecologists and atmospheric scientists.

In 2004, we initiated studies of the prevalence of blood parasites in montane forest songbirds, another potential stressor for Bicknell's Thrush and other species. Preliminarily, we have found that 5 of 9 thrushes sampled on Mt. Mansfield had low blood levels of *Leucocytozoon* (Figure 1), an avian hemosporidia parasite with black flies as vectors. We will continue this study, in cooperation with Ellen Martinsen at the University of Vermont, as we examine potentially synergistic effects of blood parasites and mercury loading, such as reduced survivorship.

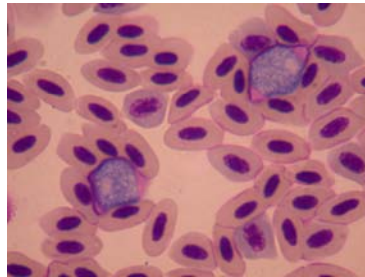


Figure 1. *Leucocytozoon*, an avian hemosporidia parasite, in Bicknell's Thrush blood.

We captured 8 Blackpoll Warblers in 2004 and 17 birds in 2005 (Appendix B). Seven individuals had been captured in a previous year. One male originally banded in 2000 was recaptured in every year through 2004, although it was not detected in 2005. Another male banded in 2001 was recaptured in 2003 and 2004, while a female banded as a yearling in 2001 was recaptured in 2005, having gone undetected in 2002-2004. Of the 7 recaptured birds in 2004 or 2005, 3 went undetected in at least one year subsequent to their original capture year. This suggests that some individuals moved home ranges outside our netting areas between years, or that our sampling intensity was inadequate to ensure high recapture probabilities between years. This latter possibility underscores the importance of long-term, standardized mark-recapture studies. It also suggests that 3 annual visits may not be sufficient to document a representative cohort of breeding birds that

are present in a given year. Our qualitative impression was that numbers of Blackpoll Warblers were higher on the Mt. Mansfield ridgeline in 2005 than in 2004. However, our long-term point count data did not reflect this, as both 2004 and 2005 population indices were similar and much higher than either 2002 or 2003, the two lowest years recorded since monitoring began in 1991 (Faccio and Rimmer 2005; Part II below). We can only speculate that the increased numbers of banded Blackpoll Warblers in 2005, 5 of which were yearling birds, may have reflected in part unmated, nonterritorial birds that were not detected during point counts. The long-term demographics of this species on the Mansfield ridgeline, and elsewhere in its northeastern U.S. breeding range, warrant further close study.

We captured 8 adult Yellow-rumped Warblers on the Mt. Mansfield ridgeline in 2004 and 14 in 2005 (Appendix C). Three individuals had been banded in a previous year. One female banded in 2000 recaptured in 2004, although not during the intervening 3 years, making this the oldest known individual (5+ years old). For reasons that are not currently clear, this species shows a lower return rate to the Mt. Mansfield ridgeline than either Bicknell's Thrush or Blackpoll Warbler.

Our plans for 2006 include increasing sampling intensity from recent years, both in terms of more mist-netting effort and more intensive colorband resighting sessions. We will also continue collection of blood and feather samples for mercury and parasite analysis. We will especially target for recapture known-identity individuals for which we have blood and feather samples from previous years. These individuals present an opportunity to obtain data that are unique among free-ranging wildlife and are especially important to understand patterns of mercury burdens in montane forest birds, and their potential demographic costs.

Acknowledgments

We are grateful to Gary Gendimenico and the Stowe Mountain Resort for allowing us access at odd hours to the Mt. Mansfield toll road and for overnight use of the ski patrol hut. We also thank Brendan Collins, Sam Edmonds, Dave Stemple, and Ben and Leslie Rimmer for field assistance.

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Part II. Forest Bird Surveys on Mt. Mansfield and Lye Brook Wilderness Area

Steven D. Faccio and Christopher C. Rimmer

In 2004 and 2005, the Vermont Institute of Natural Science (VINS) continued breeding bird surveys at 3 permanent study sites on Mt. Mansfield and on 1 site at the Lye Brook Wilderness Area (LBWA) of the Green Mountain National Forest. The Mt. Mansfield ridgeline was surveyed for the 14th and 15th consecutive years, while the Ranch Brook site was censused for the 10th year in 2005 (the 2004 survey was not completed due to inclement weather on attempted survey dates). Our permanent study site at Underhill State Park was surveyed for the 13th year in 2004, however, the observer was unable to conduct the survey in 2005 due to maternal responsibilities. The LBWA was surveyed for the 6th consecutive year in 2005.

The Underhill State Park site consisted of mature northern hardwoods at an elevation of 671 m (2200 ft), while the Mansfield ridgeline site, at 1158 m (3800 ft), consisted of montane fir-spruce. The Ranch Brook site ranged between 975 and 1097 m (3200 and 3600 ft), and was dominated by a paper birch-fir canopy. The Lye Brook study site, located in Winhall, just north of Little Mud Pond, was characterized by mature northern hardwoods at an elevation of 701 m (2300 ft).

These four study sites are part of VINS' long-term Forest Bird Monitoring Program (FBMP). This program was initiated in 1989 with the primary goals of conducting habitat-specific monitoring of forest interior breeding bird populations in Vermont and of tracking long-term changes (Faccio et al. 1998). As of 2005, VINS had established 38 monitoring sites in 9 different forested habitats in Vermont, with additional sites in New York, New Hampshire, Maine, and Massachusetts. A complementary, volunteer-based, long-term monitoring program, called Mountain Birdwatch, was initiated in 2000 to collect census data on five common montane forest bird species throughout the Northeast. In addition to collecting data on bird populations at each site, baseline habitat measurements have been collected at 25 "low elevation" FBMP sites (< 2500 feet elevation), including Underhill State Park and Lye Brook Wilderness.

Methods

Surveys were conducted by VINS staff biologists at the Mt. Mansfield Ridgeline and Ranch Brook sites, and by volunteer biologists at the Lye Brook and Underhill sites. Survey methods consisted of unlimited distance point counts, based on the approach described by Blondel et al. (1981) and used in Ontario (Welsh 1995). The count procedure was as follows:

- 1) Counts began shortly after dawn on days where weather conditions were unlikely to reduce count numbers (i.e., calm winds and very light or no rain). Censusing began shortly (< 1 min) after arriving at a station.
- 2) Observers recorded all birds seen and heard during a 10-min sampling period, which was divided into 3 time intervals: 3, 2, and 5 mins. Observers noted in which time interval each bird was first encountered and were careful to record individuals only once. To reduce duplicate records, individual birds were mapped on standardized field cards, and known or presumed movements were noted. Different symbols were used to record the status of birds encountered (i.e., singing male, pair observed, calling bird, etc.).
- 3) Each site, consisting of 5 point count stations, was sampled twice during the breeding season: once during early June (ca. 2-12 June) and once during late June (ca. 14-30 June). Observers were encouraged to space their visits 7-10 days apart. For each site visit, all stations were censused in a single morning and in the same sequence.

In summarizing data for analysis, the maximum count for each species was used as the station estimate for each year. All birds seen or heard were each counted as 1 individual unless a family group or active nest was encountered, in which case they were scored as a breeding pair, or 2 individuals. Population trends were calculated for the 8 most commonly encountered species at each site using simple linear regression. For each species, the annual population trend was calculated by plotting the maximum count against year, and then calculating the mean annual rate of change of a linear trendline inserted through the points. Regression analyses were done using SYSTAT 10.2.

Results

A combined total of 47 avian species was detected during breeding bird surveys at three study sites on Mt. Mansfield from 1991-2005. Species richness was the same at both montane forest sites, with 30 species detected. Surveys at Ranch Brook averaged a greater number of individuals and species per year than the higher elevation and more exposed Mansfield ridgeline site (Tables 1 and 2). Surveys at the mid-elevation, northern hardwood study sites at Underhill State Park and Lye Brook Wilderness showed similar species composition, with each site averaging just over 18 species per year (Tables 3 and 4).

Mount Mansfield

On the Mt. Mansfield ridgeline plot in 2005, both species richness and numerical abundance were below the 15-year average, with 56 individuals of just 11 species detected, equaling the 1994 mark for the lowest number of species recorded (Table 1). Of the 8 most commonly recorded species, all but Winter Wren were below the 15-year average. Population trends for these 8 species were split, with 4 species showing non-significant increases, and 4 species declining. Only Bicknell's Thrush exhibited a significant result, declining at 2.73% per year ($r^2 = 0.260$; $P = 0.017$; Figure 1).

At the Ranch Brook study site in 2005, the number of individuals was below the 10-year average, while species richness was higher, with 74 individuals of 17 species counted (Table 2). Among the 8 most common species, 5 were below the 10-year mean and 3 were above. Overall, 3 of these 8 species showed increasing trends, while 5 declined. The only significant population trend evident was for White-throated Sparrow, which declined at a rate of 5.55% per year ($r^2 = 0.412$; $P = 0.045$; Figure 2). Bicknell's Thrush numbers rebounded from the record low count of 1 in 2003, to 8 in 2005, equaling the previous high count recorded in 2002.

At Underhill State Park in 2004, both species richness and total number of individuals were below the 13-year average, with 60 individuals of 17 species detected (Table 3). Among the 8 most common species at the site, half were above the 13-year mean, with counts of Black-throated Blue and Black-throated Green warblers the highest ever recorded at the site. Overall, 7 species showed increasing population trends, while Canada Warbler declined significantly over the period at 5.60% per year ($r^2 = 0.475$, $P = 0.009$; Figure 3). Among positive trends, Black-throated Green Warbler increased at 7.84% annually ($r^2 = 0.594$, $P = 0.002$), and Red-eyed Vireo increased at 4.92% per year ($r^2 = 0.217$, $P = 0.109$; Figure 4).

Lye Brook Wilderness

At Lye Brook in 2005, both the number of individuals and species richness were below the 6-year average, with 65 individuals of 17 species detected (Table 4). Among the 8 most common species, three were above the 6-year average (Black-throated Blue Warbler, Black-throated Green Warbler, and Dark-eyed Junco). Similar to Underhill State Park, counts of Black-throated Blue and Black-throated Green warblers were at or near record highs, respectively, at the Lye Brook site. Population trends for these common species were split, with half increasing and half declining. Tests of statistical significance were not conducted for Lye Brook, due to the relatively short timeframe of the study.

Discussion

Ongoing, standardized bird surveys on Mt. Mansfield are beginning to show interesting patterns, and the population fluctuations evident for some species underscore the need for continued monitoring and development of a long-term database. The significant decline in Bicknell's Thrush numbers on the Mansfield Ridgeline plot is of concern, and is consistent with results of other recent trend analyses. Lambert et al. (*in review*) documented a significant annual decline of 7% for Bicknell's Thrush on 40 survey routes in New Hampshire's White Mountains between 1992 and 2003, although no significant trend was detected on a smaller number of survey routes in Vermont, including the Mt. Mansfield ridgeline site. This apparent contrast may have resulted from small sample sizes, as the Vermont surveys were conducted on only six routes, half of which produced counts of 0 or 1 on a regular basis. In addition, a recent effort at range-wide monitoring of Bicknell's Thrush found a 9% annual decline ($P = 0.07$) between 2001-2004 on 47 routes located in New York, Vermont, New Hampshire, and Maine (Lambert 2005).

The significant decline of Canada Warbler at the Underhill study site is also of concern. Canada Warbler is a species of high conservation concern within the bioregion (Rich et al. 2004), and results from the North American Breeding Bird Survey indicate that it has exhibited significant population declines throughout the northeastern portion of its breeding range (Sauer et al. 2005). Although the species has declined at a rate of 5.8% annually on Vermont Forest Bird Monitoring sites between 1989-2004, the result is not statistically significant ($P = 0.37$; Faccio and Rimmer, unpublished data).

These population trend estimates must be interpreted carefully, however. The site-specific trends presented for Mt. Mansfield study sites are preliminary trends from a limited geographic sample with very low power. Changes in survey counts may simply reflect natural fluctuations, variable detection rates, and/or a variety of dynamic factors, such as prey abundance, overwinter survival, and habitat change. Several years of additional data collection, their correlation with other VMC data, and comparison with census data from other ecologically similar sites will be necessary to elucidate meaningful population trends of various species at these sites.

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Table 1. Maximum counts of individual birds, and population trends from linear regression analysis for the 8 most common species (bold type) at Mt. Mansfield Ridgeline, 1991-2005.

Common Name	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	Mean	SD	r ²	Annual Trend (%)
Red Squirrel											1					0.07	0.26		
Sharp-shinned Hawk										1						0.07	0.26		
Hairy Woodpecker				1												0.07	0.26		
Northern Flicker			1													0.07	0.26		
Yellow-bellied Flycatcher			1		1	2	3		1	1	1	1	2	1		0.93	0.88		
Alder Flycatcher							1									0.07	0.26		
Red-eyed Vireo									1							0.07	0.26		
Blue Jay		1												1		0.13	0.35		
Common Raven			1			1			1	1		1	1	1		0.47	0.52		
Red-breasted Nuthatch	1	2	3	1	3	1		1	2		1				1	1.07	1.03		
Winter Wren	10	9	7	4	5	2	4	10	8	4	4	7	3	7	8	6.13	2.59	0.03	-1.06
Golden-crowned Kinglet										1						0.07	0.26		
Ruby-crowned Kinglet		2			1							1	1			0.33	0.62		
Bicknell's Thrush	6	15	11	8	10	11	9	9	8	7	9	9	6	5	8	8.73	2.46	0.26	-2.73**
Swainson's Thrush	3	8	1	1	3	6	7	5	4	3	3	2	2	1	2	3.40	2.20	0.12	-3.61
Hermit Thrush											1		1			0.13	0.35		
American Robin	1	4	1	2	2	2	2	1	1	3	3	2	6	3	1	2.27	1.39		
Cedar Waxwing		1	4				9							1		1.00	2.45		
Nashville Warbler	2					2	3	1	1		1		1			0.73	0.96		
Magnolia Warbler	1	2				3	1	1			1		3	1	4	1.13	1.30		
Yellow-rumped Warbler	9	11	8	9	8	12	10	13	11	9	11	14	10	13	9	10.47	1.88	0.15	1.56
Blackpoll Warbler	8	9	9	7	7	15	10	10	9	8	8	3	3	9	8	8.20	2.83	0.10	-1.91
Ovenbird			1						1							0.13	0.35		
Canada Warbler							1									0.07	0.26		
Lincoln's Sparrow	2					1										0.20	0.56		
White-throated Sparrow	6	14	14	12	14	13	20	14	19	14	18	11	13	11	10	13.53	3.56	0.00	0.15
Dark-eyed Junco	3	9	6	2	5	5	9	8	7	2	7	6	5	7	4	5.67	2.26	0.00	0.24
Purple Finch	2	4	1	2	3	2	2	1	4	2	3	4	4	2	1	2.47	1.13	0.00	0.58
White-winged Crossbill					8		1	1								0.67	2.06		
Pine Siskin		1			1		2	1			11					1.07	2.81		
Evening Grosbeak		2														0.13	0.52		
Species Richness^a	13	16	15	11	14	15	17	14	15	13	15	12	15	14	11	14.00	1.73		
Number of Individuals^a	54	94	69	49	71	78	94	76	78	56	80	61	61	63	56	68.33	13.3		

^a Does not include counts of Red Squirrel

** $P = 0.017$

Table 2. Maximum counts of individual birds, and population trends from linear regression analysis for the 8 most common species (bold type) at Ranch Brook, 1995-2005.

Common Name	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	Mean	SD	r ²	Annual Trend (%)
Red Squirrel					4		1		7			1.20	2.39		
Sharp-shinned Hawk				1							1	0.20	0.42		
Mourning Dove						1	1					0.20	0.42		
Ruby-throated Hummingbird						1						0.10	0.32		
Hairy Woodpecker	1											0.10	0.32		
Pileated Woodpecker							2					0.20	0.63		
Yellow-bellied Flycatcher	4	4	4	3	3	4	2	4	4		3	3.50	0.71	0.087	-1.48
Red-eyed Vireo				1								0.10	0.32		
Blue Jay	1										1	0.20	0.42		
Common Raven		4	3	4		4	2					1.70	1.89		
Black-capped Chickadee	1											0.10	0.32		
Red-breasted Nuthatch	7		2		6		2		2		4	2.30	2.58	0.017	
Winter Wren	8	3	7	10	9	10	5	5	9		10	7.60	2.50	0.080	2.78
Golden-crowned Kinglet				1	3	1		3			2	1.00	1.25		
Ruby-crowned Kinglet	3		3			3			1		1	1.10	1.37		
Bicknell's Thrush	5	6	7	5	5	6	2	8	1		8	5.30	2.31	0.002	-0.83
Swainson's Thrush	6	15	9	5	3	4	8	11	10		8	7.90	3.60	0.000	0.06
Hermit Thrush	1		3									0.40	0.97		
American Robin		2	2	2	1	1	1	1	3		4	1.70	1.16		
Cedar Waxwing				1			1				1	0.30	0.48		
Nashville Warbler		1	3	2	1	3		3	4		3	2.00	1.41		
Northern Parula									1			0.10	0.32		
Magnolia Warbler	2	4	4	2	3	5	4	2	4		2	3.20	1.14		
Black-throated Blue Warbler	1											0.10	0.32		
Yellow-rumped Warbler	5	6	4	5	7	11	9	11	8		4	7.00	2.67	0.106	3.76
Blackpoll Warbler	9	9	15	8	3	8	7	8	8		8	8.30	2.91	0.087	-2.55
White-throated Sparrow	22	11	12	9	8	7	7	10	10		7	10.30	4.47	0.412	-5.55**
Dark-eyed Junco	9	5	3	2	5	2	5	4	4		7	4.70	2.21	0.003	-0.91
Purple Finch	2	1	4	4	2	4	4		6			2.70	2.00		
White-winged Crossbill	8		2		1		6					1.70	2.91		
Pine Siskin	12		1		7							2.00	4.14		
Species Richness^a	19	13	18	17	16	17	18	12	15		17	16.20	2.25		
Number of Individuals^a	107	71	88	65	67	75	69	82	82		74	78.00	12.55		

^a Does not include counts of Red Squirrel

** $P = 0.045$

Table 3. Maximum counts of individual birds, and population trends from linear regression analysis for the 8 most common species (bold type) at Underhill State Park, 1991-2004.

Common Name	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	Mean	SD	r ²	Annual Trend (%)
Eastern Chipmunk							3		5					1	0.69	1.55		
Red Squirrel							1		3		1				0.38	0.87		
Broad-winged Hawk							1								0.08	0.28		
Mourning Dove									1					1	0.15	0.38		
Yellow-bellied Sapsucker		2		1	1		1	1	1		3			2	0.92	0.95		
Downy Woodpecker							1								0.08	0.28		
Hairy Woodpecker				1			1	1	2						0.38	0.65		
Northern Flicker			1												0.08	0.28		
Pileated Woodpecker	2	1	1			1									0.38	0.65		
Eastern Phoebe												1			0.08	0.28		
Blue-headed Vireo	1	2				1	1			1				1	0.54	0.66		
Red-eyed Vireo	3	4	4	6	9	8	7	6	10	8	8	7		5	6.54	2.11	0.217	4.92*
Blue Jay	2	1		1		2	2		1	1	2	1		1	1.08	0.76		
Common Raven				4	1				1		1			1	0.62	1.12		
Black-capped Chickadee		1	1		2	3	3		3	1	1				1.15	1.21		
Red-breasted Nuthatch							1								0.08	0.28		
White-breasted Nuthatch							1							1	0.15	0.38		
Brown Creeper				1					1	1		1		1	0.38	0.51		
Winter Wren		6	2	1	5	3	4	6	4	4	3	3		3	3.38	1.76	0.038	3.02
Golden-crowned Kinglet								1							0.08	0.28		
Veery	1	1								1					0.23	0.44		
Swainson's Thrush		1		2	4	3		1	4	2	2				1.46	1.51		
Hermit Thrush		4	1	6	7	3	4	4	2		4	5		4	3.38	2.14	0.020	2.92
Wood Thrush	1	1													0.15	0.38		
American Robin	1				3	3	3	4	2	1	2	1		2	1.69	1.32		
Magnolia Warbler	1				1										0.15	0.38		
Black-th. Blue Warbler	4	9	5	6	7	8	6	5	6	5	5	5		11	6.31	1.97	0.038	1.59
Yellow-rumped Warbler			2	2		2	3	3	1	1	3	2			1.46	1.20		
Black-th. Green Warbler	5	7	6	7	7	7	9	5	8	10	10	8		13	7.85	2.23	0.594	7.84**
Blackburnian Warbler											1	1			0.15	0.38		

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		
157106502	6	5	0	0	1	1															4	
157106506	5	4	1	1	3	1																4
157106501	6	5	1	0	1	1																2
157106503	5	4	1	1	2	1																2
157106504	5	4	1	1	2	1																2
157106505	6	4	1	1	2	1																2
157106531	5	5	1	1	1	1																2
122190059	2	4	4	3	3	4									1		1	3				1
135192242	5	4	3	3	3	3										1		2				1
157106510	5	4	1	1	1	1																1
157106534	5	4	1	1	1	1																1
157106535	5	4	1	1	1	1																1
157106537	4	0	0	1	1	1																1
157106538	4	0	0	1	1	1																1
157106540	5	4	1	1	1	1																1
157106543	5	4	1	1	1	1																1
135192273	5	4	2	2	3	2													3	1		
122190057	6	4	4	3	3	4									1	1		1	1			
124110998	6	5	4	3	4	5						1				1	1	1	1			
135192289	5	5	1	2	2	2												1	1			
135192239	6	4	2	2	2	2										1				1		
141197188	2	0	1	0	1	1																1
141197189	2	0	1	0	1	1																1
141197190	2	0	1	0	1	1																1
141197192	2	0	1	0	0	1																1
135192275	5	4	1	1	2	1													4			
135192274	6	5	1	1	2	1													2			
135192286	6	4	1	1	1	1													1			
141197179	1	0	1	1	0	1													1			
153148030	5	4	3	3	3	4								1	2	1		1				
116117715	1	4	0	0	0	3		1	1	2												

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
116117716	5	4	0	0	0	1		1												
116117717	1	5	0	0	0	2		1	1											
122180007	6	4	1	0	0	1						1								
122180025	5	4	1	0	0	3					1	2	1							
122180031	5	4	1	0	0	1					1									
122180047	6	4	0	0	0	1						1								
122180050	6	4	0	0	0	1						2								
122180051	6	4	1	0	0	2						1	2							
122180063	2	0	0	0	0	1						1								
122180064	1	4	4	3	3	6						3	1	2	1	6	1			
122180066	2	0	0	0	0	1						2								
122180068	2	0	0	0	0	1						1								
122180069	2	0	0	0	0	1						1								
122180076	2	0	0	0	0	1						1								
122180085	2	0	0	0	0	1						1								
122180088	2	0	0	0	0	1						1								
122180089	1	0	0	0	0	1						1								
122180092	2	0	0	0	0	1						1								
122190005	6	0	0	0	0	1					1									
122190006	6	4	3	1	1	5					5	3	1	2	2					
122190009	2	0	1	0	0	1					1									
122190010	2	0	0	0	0	1					1									
122190033	2	0	0	0	0	1						1								
122190037	6	4	1	0	0	1							1							
122190046	5	4	0	1	1	1									1					
122190050	5	4	0	1	1	1									1					
122190051	6	4	1	2	2	2									1		1			
122190052	4	0	1	1	1	1									1					
122190053	6	4	0	1	1	1									1					
122190054	6	4	0	1	1	1									1					
122190055	4	0	1	1	1	1									1					

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
122190058	2	0	1	0	0	1									1					
123150039	2	0	0	0	0	1					1									
123150040	2	0	0	0	0	1					1									
123150053	2	5	0	0	0	1					3									
123150057	2	0	0	0	0	1					1									
123150059	2	0	0	0	0	1					1									
123150080	2	0	0	0	0	1					2									
123150088	2	0	0	0	0	1					1									
123150090	2	0	0	0	0	1					1									
123150091	2	0	0	0	0	1					1									
123150093	2	0	0	0	0	2					1		2							
123150096	2	0	0	0	0	1					1									
123150098	2	4	0	0	0	1					2									
123150100	2	5	2	0	0	3					1	1			1					
123160026	2	0	0	0	0	1					1									
124110979	6	4	0	0	0	1						1								
124110982	5	5	0	0	0	1						1								
124110985	6	0	0	0	0	1						1								
124110986	4	0	0	0	0	1						1								
124110987	4	0	0	0	0	1						1								
124110988	4	0	0	0	0	1						1								
124110989	4	0	0	0	0	1						1								
124110991	5	5	0	0	0	1						1								
124120042	5	4	0	0	0	1						1								
135192007	6	4	0	1	1	1										1				
135192104	5	4	3	3	3	4								3	2	2	1			
135192110	5	4	1	0	0	1								1						
135192111	5	4	1	0	0	1								1						
135192130	4	0	0	0	0	1								1						
135192131	4	0	0	0	0	1								1						
135192161	5	4	0	0	1	1										1				

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
135192171	4	0	0	0	1	1									2					
135192172	4	0	0	0	1	1									2					
135192173	4	0	0	0	1	1									2					
135192233	5	5	1	1	1	1										4				
135192240	5	4	1	1	1	1										1				
135192241	5	4	1	1	0	1										1				
135192245	5	5	1	1	1	1										1				
135192248	2	0	0	0	0	1										1				
135192256	6	5	1	1	2	1											2			
135192268	2	0	1	0	0	1											1			
135192320	5	0	1	1	0	1										1				
147147901	1	4	0	0	0	3	1	1	4											
147147902	5	5	0	0	0	1	1													
147147903	1	4	0	0	0	1	1													
147147904	5	4	0	0	0	3	1	2	1											
147147908	4	0	0	0	0	1	1													
147147909	4	0	0	0	0	1	1													
147147910	1	5	0	0	0	2	1	2												
147147912	1	5	0	0	0	5	1		1	1	2	2								
147147913	1	4	0	0	0	1		2												
147147915	1	4	0	0	0	1		1												
147147918	1	4	0	0	0	1		2												
147147919	1	5	0	0	0	1		1												
147147920	1	4	0	0	0	2		2	1											
147147921	1	5	0	0	0	2		2	3											
147147922	1	4	0	0	0	1		1												
147147923	1	4	0	0	0	3		1	1	3										
147147924	1	4	0	0	0	1		2												
147147925	5	4	0	0	0	2		1		2										
147147927	1	4	0	0	0	3		1	2	4										
147147928	1	5	0	0	0	1		1												

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
147147929	1	4	0	0	0	1		1												
147147932	1	4	0	0	0	3		2	3	1										
147147934	2	0	0	0	0	1		1												
147147935	2	0	0	0	0	1		1												
147147936	1	0	0	0	0	1			1											
147147939	1	4	0	0	0	3			1	1	1									
147147940	1	4	0	0	0	1			1											
147147941	1	4	0	0	0	2			2		2									
147147942	1	5	0	0	0	4			1		1	1	1							
147147943	1	4	0	0	0	2			1	2										
147147945	2	0	0	0	0	1			1											
147147947	1	5	0	0	0	1			1											
147147949	2	0	0	0	0	1			2											
147147950	2	4	0	0	0	2			1		1									
147147951	2	0	0	0	0	1			1											
147147953	2	0	0	0	0	1			1											
147147954	2	0	0	0	0	1			1											
147147955	2	0	0	0	0	1			1											
147147956	2	0	0	0	0	1			1											
147147957	2	0	0	0	0	1			1											
147147958	2	0	0	0	0	1			1											
147147959	2	0	0	0	0	1			1											
147147960	5	0	0	0	0	1				1										
147147961	1	5	1	1	0	6				4	2	4	2	2	1					
147147962	1	4	0	0	0	1				1										
147147963	6	5	0	0	0	1				2										
147147964	5	5	1	0	0	5				6	2	2	1	2						
147147965	5	4	1	1	1	6				10	10	2	1	5	2					
147147966	1	0	0	0	0	1				1										
147147967	1	4	0	0	0	1				1										
147147968	1	5	0	0	0	1				1										

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
147147969	5	4	0	0	0	3				3	5	3								
147147970	6	4	0	0	0	1				1										
147147971	2	0	0	1	1	3				1		3			1					
147147974	5	4	0	0	0	1				1										
147147975	5	5	0	0	0	1				1										
147147976	2	0	0	0	0	2				1	1									
147147977	4	0	0	0	0	1				1										
147147978	4	0	0	0	0	1				1										
147147980	6	4	0	0	0	1					2									
148127516	1	4	0	0	0	1				1										
148127521	1	4	0	0	0	3				1	1	2								
148127522	1	5	0	0	0	2				3	2									
148127541	5	5	0	0	0	2				1	1									
148127551	2	0	0	0	0	1				2										
148127564	6	4	0	0	0	2					4	1								
148127573	2	0	0	0	0	1					3									
153148032	6	4	1	0	0	1									3					
153148061	5	5	0	0	1	1										2				
153148065	5	4	0	1	1	1									1					
153148127	2	0	0	0	0	1				1										
153148136	2	0	0	0	0	1				1										
153148141	2	0	0	0	0	1				1										
153148142	2	0	0	0	0	1				1										
153148166	2	0	0	0	0	1				1										
153148171	1	0	0	0	0	1				1										
153148301	2	0	0	0	0	1					1									
153148304	2	0	0	0	0	1					1									
153148312	2	0	0	0	0	1					1									
153148321	1	0	0	0	0	1					1									
153148331	2	0	0	0	0	1					1									
153148332	2	0	0	0	0	1					2									

Appendix A. Bicknell's Thrush capture histories on Mt. Mansfield ridgeline, 1992-2005.

Band Number	Age (first capture)	Sex	Tail Feather Samples (n)	Secondary Feather Samples (n)	Blood Samples (n)	Total Years Captured	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
153148339	2	0	0	0	0	1					1									
153148340	2	0	0	0	0	1					1									
153148342	2	4	2	0	0	3					1	3		2						
157105012	6	4	1	0	0	1							1							
157105108	5	0	0	0	0	1						1								
157105109	5	0	0	0	0	1						1								
157105111	5	0	0	0	0	1						2								
157105122	4	0	0	0	0	1						1								
157105123	4	0	0	0	0	1						1								
199600001	5	0	0	0	0	1					1									
199900004	4	0	0	0	0	1								1						
199900005	4	0	0	0	0	1								1						
200100001	4	0	0	0	0	1										1				
200100005	4	0	0	0	0	1										1				

Appendix B. Blackpoll Warbler capture histories on Mt. Mansfield ridgeline, 1994-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
222095806	1	4	2											1	2
222096502	1	4	1												2
222096509	1	5	1												2
239049470	1	4	2										3		1
175062362	5	5	2								1				1
222096501	1	4	1												1
222096510	1	4	1												1
222096512	1	5	1												1
222096514	1	5	1												1
222096515	1	5	1												1
222096516	1	4	1												1
222096517	1	5	1												1
222096520	1	4	1												1
222096522	5	5	1												1
222096524	5	4	1												1
222096525	4	0	1												1
222096526	5	5	1												1
175062366	1	4	3								2		2	1	
239049211	1	4	5							1	1	2	2	1	
239049460	1	5	2										2	1	
178001040	5	5	2										1	1	
222095808	6	4	1											1	
222095811	1	4	1											1	
222095812	6	5	1											1	
222095815	6	5	1											1	
239048483	1	5	3							1	2		2		
239049462	1	5	1										2		
175062383	1	5	2								1		1		
200300001	5	5	1										1		
239048423	1	4	3							2	1		1		
239049445	1	4	2									1	1		
239049456	1	5	1										1		
239049457	5	4	1										1		
239049459	1	5	1										1		
239049463	1	5	1										1		
239049469	1	5	1										1		
239049472	5	5	1										1		
239049473	5	5	1										1		
239049474	6	4	1										1		
239049478	6	4	1										1		
239049479	5	4	1										1		
239049480	5	4	1										1		
239049484	6	4	1										1		
239049486	5	4	1										1		
239049487	5	4	1										1		
239049488	1	4	1										1		
175062005	1	5	2			1	1								
175062025	1	4	1				2								
175062057	1	5	1				2								
175062058	1	5	1				2								
175062059	1	4	1				2								
175062060	1	5	1				1								
175062061	1	5	1				1								
175062062	1	5	1				1								
175062063	1	5	1				1								

Appendix B. Blackpoll Warbler capture histories on Mt. Mansfield ridgeline, 1994-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
175062064	1	4	1				4								
175062088	1	4	1				1								
175062090	4	0	1				1								
175062091	4	0	1				1								
175062092	4	0	1				1								
175062093	1	5	2				1			1					
175062094	1	5	2				2	2							
175062095	1	4	1				1								
175062096	1	5	1				1								
175062097	1	5	3				1		1	3					
175062098	1	5	1				1								
175062099	1	5	1				1								
175062100	1	4	2				1	1							
175062101	1	5	1				1								
175062102	1	4	2				3	1							
175062103	1	4	2				5	3							
175062104	1	5	1				1								
175062105	1	4	3				2	1		1					
175062106	1	5	1				1								
175062107	1	4	1				1								
175062108	1	4	1				1								
175062109	1	5	1				1								
175062110	1	5	1				1								
175062111	1	4	1				1								
175062112	1	5	2				1	2							
175062113	4	0	1				1								
175062114	4	0	1				1								
175062115	4	0	1				1								
175062116	4	0	1				1								
175062117	4	0	1				1								
175062118	4	0	1				1								
175062119	4	0	1				1								
175062120	1	4	3				1	2		1					
175062121	4	0	1				1								
175062122	4	0	1				1								
175062123	4	0	1				1								
175062124	4	0	1				1								
175062125	1	4	1				1								
175062126	2	0	1				1								
175062127	1	5	1				1								
175062128	2	0	1				1								
175062129	2	0	1				2								
175062130	2	0	1				1								
175062131	1	5	1				1								
175062132	2	0	1				1								
175062133	2	0	1				1								
175062134	2	0	1				1								
175062135	1	5	1				1								
175062136	1	5	1					2							
175062137	1	5	1				1								
175062270	1	4	1				3								
175062276	6	4	1								1				
175062299	1	5	1					1							
175062308	1	4	1						1						
175062353	6	5	1								3				

Appendix B. Blackpoll Warbler capture histories on Mt. Mansfield ridgeline, 1994-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
175062357	5	5	1								2				
175062358	6	5	1								2				
175062359	5	5	1								1				
175062361	5	4	1								1				
175062363	1	5	1								2				
175062367	1	4	1								1				
175062369	6	4	1								1				
175062371	1	4	1								1				
175062374	1	4	1								1				
175062375	6	5	1								2				
175062376	1	5	1								1				
175062377	6	4	1								2				
175062380	5	5	1								1				
175062381	5	4	1								1				
175062382	6	5	1								1				
175062384	5	4	1								1				
175062385	6	4	1								1				
175062386	6	5	1								1				
175062388	5	4	1								1				
175062392	5	4	1								1				
175062394	1	4	1								1				
175062395	5	5	1								1				
175062398	5	4	1								1				
186019210	5	4	1				1								
186019213	1	5	1					1							
186019214	1	4	1					1							
186019215	1	5	1					1							
186019216	1	4	1					1							
186019217	1	5	1					1							
186019242	1	4	1							1					
186019243	1	5	1							1					
186019244	1	4	3							1	1	2			
186019286	1	5	1								1				
186019299	1	4	1							1					
186019506	1	4	1					2							
186019508	1	5	1					1							
186019510	1	4	1					1							
186019517	1	5	1					2							
186019523	1	5	1					1							
186019524	1	5	1					1							
186019708	1	5	1				2								
186019710	5	4	1				1								
186019711	1	5	1				1								
186019712	1	4	1				1								
186019713	1	4	1				1								
186019714	1	4	1				1								
186019716	1	5	1				1								
186019717	2	0	1				2								
186019718	1	4	1				1								
186019719	1	4	2				1	1							
186019720	1	5	1				1								
186019721	1	5	1				1								
186019722	1	5	1				1								
186019726	2	0	1				1								
186019727	1	5	1				1								

Appendix B. Blackpoll Warbler capture histories on Mt. Mansfield ridgeline, 1994-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
186019729	1	5	1				1								
186019731	1	5	1				1								
186019732	1	5	2				1	1							
186019733	2	0	1				1								
191046602	1	5	1	1											
191046603	1	4	1	2											
191046604	1	4	1	1											
191046605	1	4	1	1											
191046607	1	4	2	2	1										
191046612	1	5	1	1											
191046613	1	4	1	1											
191046615	1	5	1	1											
191046616	1	5	3	1		1	1								
191046623	2	0	1	1											
191046624	1	5	1	1											
191046643	8	4	1			1									
191046645	1	5	1		1										
191046646	1	4	3		3	4	2								
191046647	1	4	2		1	1									
191046650	1	4	1		2										
191046651	1	5	1		1										
191046652	1	4	1		3										
191046657	1	4	1		1										
191046658	1	0	1		1										
191046659	1	0	1		1										
191046660	5	4	1		1										
191046662	1	4	1		2										
191046663	1	4	1		1										
191046665	1	5	1		1										
191046670	1	4	2		2	1									
191046675	1	4	2		1	2									
191046696	1	4	2		1	1									
205082901	2	0	1		1										
205082902	1	5	1		1										
205082905	2	0	1		1										
205082912	2	4	1		1										
205082933	1	5	1			2									
205082934	1	4	3			3	1	1							
205082935	1	5	1			1									
205082937	1	5	1			3									
205082944	1	5	1			3									
205082946	1	4	2			2		1							
205082948	1	4	1			1									
205082949	1	4	1			3									
205082950	1	5	1			3									
205082959	1	4	1			1									
205082960	1	4	1			1									
205082961	1	5	1			1									
205082966	2	0	1			1									
205082969	2	0	1			1									
205082970	1	5	1			1									
205083092	1	5	1				3								
205083549	1	4	1				2								
205083696	1	0	1			1									
205083747	1	4	1				1								

Appendix B. Blackpoll Warbler capture histories on Mt. Mansfield ridgeline, 1994-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
205084401	1	4	3			4	1	2							
205084402	1	5	1			1									
205084417	1	5	1			1									
239048415	1	5	1					1							
239048416	1	5	1					1							
239048417	2	0	1					1							
239048418	2	0	1					1							
239048422	1	4	1						1						
239048424	1	5	1						1						
239048426	1	4	1						1						
239048427	1	4	1						1						
239048428	1	4	1						1						
239048477	1	4	1							1					
239048620	4	0	1					2							
239049201	1	4	1							1					
239049205	1	4	1							1					
239049210	1	5	2							1	2				
239049214	1	4	2							1	1				
239049217	1	5	1							1					
239049227	2	0	1							1					
239049229	2	0	1							1					
239049230	1	4	1							1					
239049231	2	0	1							1					
239049232	2	0	1							1					
239049233	1	4	1							1					
239049401	5	4	1								1				
239049432	2	0	1								1				
239049439	5	4	1									1			
239049442	5	4	1										1		
239049447	1	5	1										1		
239049448	1	5	1										1		
239049449	5	4	1										1		
239049450	5	5	1										1		

Appendix C. Myrtle Warbler capture histories on Mt. Mansfield ridgeline, 1999-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1999	2000	2001	2002	2003	2004	2005
222096501	1	4	1							2
222096503	5	4	1							2
222095809	6	4	2						2	1
222096504	1	5	1							1
222096505	5	4	1							1
222096506	6	5	1							1
222096507	6	4	1							1
222096508	1	4	1							1
222096511	1	4	1							1
222096513	5	5	1							1
222096519	1	4	1							1
222096521	1	4	1							1
222096523	1	4	1							1
222096527	1	5	1							1
239049465	6	4	2					2	1	
239049468	1	4	2					1	1	
222095807	6	4	1						1	
222095810	1	4	1						1	
222095813	5	4	1						1	
222095814	5	4	1						1	
239049204	1	5	2		1				1	
239049444	6	4	2				1		1	
239049455	6	4	1					2		
239049464	1	5	1					2		
239049467	6	4	1					2		
222095801	2	5	1					1		
222095802	2	0	1					1		
222095803	2	0	1					1		
239049454	5	5	1					1		
239049458	5	4	1					1		
239049461	1	5	1					1		
239049466	6	4	1					1		
239049471	5	5	1					1		
239049475	5	5	1					1		
239049476	5	5	1					1		
239049477	6	4	1					1		
239049481	5	4	1					1		
239049482	5	4	1					1		
239049483	6	4	1					1		
239049485	6	4	1					1		
175062354	6	4	1			2				
175062355	5	4	1			2				
175062356	6	5	1			1				
175062360	1	5	1			2				
175062364	5	4	1			1				
175062365	1	4	1			1				

Appendix C. Myrtle Warbler capture histories on Mt. Mansfield ridgeline, 1999-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1999	2000	2001	2002	2003	2004	2005
175062368	5	5	1			2				
175062370	6	4	1			1				
175062372	1	5	1			1				
175062373	5	4	1			1				
175062378	5	4	1			1				
175062379	1	5	1			1				
175062387	5	4	1			2				
175062389	5	5	1			1				
175062390	5	4	1			1				
175062391	6	5	1			1				
175062393	5	5	1			1				
175062396	1	4	1			1				
175062397	6	5	1			1				
175062399	5	5	1			1				
175062400	6	4	1			1				
186019285	0	4	1		4					
186019287	1	4	1		2					
186019288	1	5	1		2					
186019289	1	4	1		1					
186019290	6	4	1		1					
186019291	1	5	1		2					
186019292	1	4	2		3	1				
186019294	6	4	1		2					
186019295	6	4	2		1	1				
186019296	1	4	1		1					
186019297	6	4	1		1					
186019298	1	5	1		1					
186019525	6	4	1	1						
191047000	1	4	0							
194047000		0	0							
205083000		5	0							
239049202	5	4	1		1					
239049203	5	5	1		1					
239049206	6	4	1		1					
239049207	6	4	3		1	1	2			
239049209	6	4	1		1					
239049212	6	4	1		1					
239049213	5	5	1		1					
239049215	1	5	1		2					
239049216	5	4	1		1					
239049219	2	0	1		1					
239049220	5	4	1		1					
239049221	5	4	1		1					
239049222	1	5	1		1					
239049223	6	4	2		1	1				
239049224	6	4	1		1					

Appendix C. Myrtle Warbler capture histories on Mt. Mansfield ridgeline, 1999-2005.

Band Number	Age (first capture)	Sex	Total Years Captured	1999	2000	2001	2002	2003	2004	2005
239049225	2	0	1		1					
239049226	2	0	1		1					
239049228	2	0	1		1					
239049234	1	5	1		1					
239049240	2	0	1		1					
239049247	2	0	1		1					
239049248	5	4	1		1					
239049249	4	0	1		1					
239049250	1	5	1		1					
239049251	1	4	2		1		1			
239049253	5	5	1		1					
239049254	2	0	1		1					
239049302	6	4	1				2			
239049303	5	4	1				1			
239049370	6	4	1			1				
239049405	1	5	1			1				
239049433	2	0	1			1				
239049434	2	0	1			1				
239049436	2	0	1			1				
239049438	1	5	1				1			
239049440	5	4	1				1			
239049441	6	4	1				1			
239049443	5	5	1				1			
239049446	1	5	1				1			
239049451	5	4	1				1			
239049452	5	5	1				1			
239049453	1	4	1				1			
239049664	6	4	2		2	1				
239049665	6	4	1		2					