



Population trend estimates were calculated for the most commonly encountered species at each of the 3 study sites using simple linear regression.

### *Results*

A combined total of 50 species was detected during breeding bird surveys at three study sites on Mt. Mansfield. The two spruce-fir sites had similar species richness, with 28 and 27 species detected at Mt. Mansfield Ridgeline and Ranch Brook respectively. Surveys at Ranch Brook averaged a greater number of individuals and species per year than the higher elevation and more exposed montane

common species with low variability, 10 years of data from at least 10 study sites are needed to detect

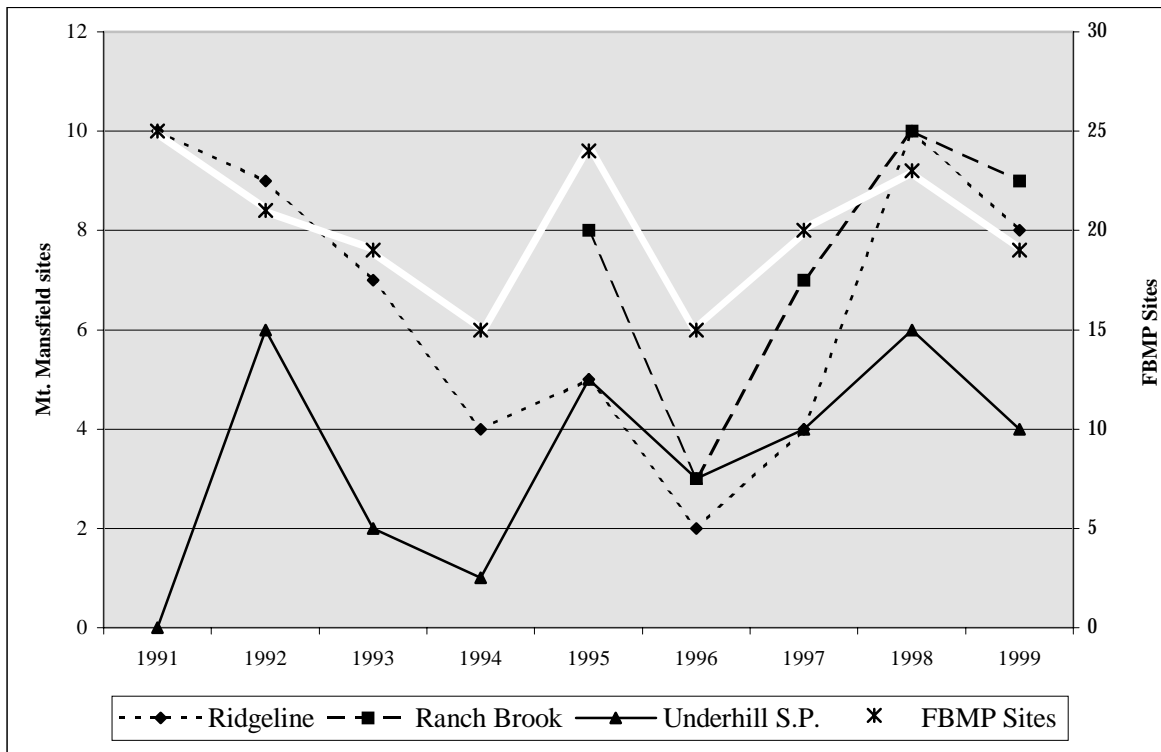


Fig. 1. Max counts of Winter Wrens at 3 Mt. Mansfield study sites and those from 9 other Vermont FBMP sites, 1991-1999.

Table 1. Maximum counts of individual birds at Mt. Mansfield Ridgeline, 1991-1999.

<b>SPECIES</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>Avg/ Year</b>
Hairy Woodpecker				1						0.11
Yellow-shafted Flicker			1							0.11
Yellow-bellied Flycatcher			1		1	2	3		1	0.89
Alder Flycatcher							1			0.11
Red-eyed Vireo									1	0.11
Blue Jay		1								0.11
Common Raven			1			1			1	0.33
Red-breasted Nuthatch	1	2	3	1	3	1		1	2	1.56
Winter Wren	10	9	7	4	5	2	4	10	8	6.56
Ruby-crowned Kinglet		2			1					0.33
Bicknell's Thrush	6	15	11	8	10	11	9	9	8	9.67

<b>SPECIES</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>Avg/ Year</b>
Red Squirrel					4	0.80
Sharp-shinned Hawk				1		0.20
Hairy Woodpecker	1					0.20
Great Crested Flycatcher				1		0.20
Yellow-bellied Flycatcher	4	4	4	3	3	3.60
Red-eyed Vireo				1		0.20

<b>SPECIES</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>Avg/ Year</b>
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<b>SPECIES</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>Avg/ year</b>	<b>Trend</b>
Red-eyed Vireo	3	4	4	6	9	8	7	6	10	6.33	0.70*

year