## What We Found

Findings from the 2006-2007 Forest Breeding Bird Survey are shown in the following tables:



| Categories               | 2006 | 2007 |
|--------------------------|------|------|
| Individual birds counted | 2095 | 2261 |
| Surveys conducted        | 180  | 186  |
| Species counted          | 74   | 67   |

The total number of birds counted, and the total number of species detected was similar between 2006 and 2007. Two survey points were added during 2007, which increased the total number of surveys by six (three surveys for each point).



| Total Number<br>by Reservations | 2006       | 2007       |
|---------------------------------|------------|------------|
| Rocky River<br>Reservation      | 760 Birds  | 776 Birds  |
| Mill Stream Run<br>Reservation  | 709 Birds  | 912 Birds  |
| Hinckley<br>Reservation         | 629 Birds  | 573 Birds  |
| TOTAL Number                    | 2098 Birds | 2261 Birds |

The total number of birds documented in each reservation is shown. Differences between years may or may not indicate true shifts in bird populations.

Surveys need to be continued through additional years to establish trends and quantify findings before conclusions can be drawn.



Baltimore Oriole © Dave Lewis

#### DID YOU KNOW?

• May 18, 2006: WCAS board hired Diane Sigler as IBA Coordinator.

# What We Found



### **Top 6 Birds (Total Number)**

| 2006                        | 2007                         |
|-----------------------------|------------------------------|
| American Robin (197)        | American Robin (201)         |
| Red-eyed Vireo (183)        | Red-eyed Vireo (198)         |
| Northern Cardinal (159)     | Northern Cardinal (198)      |
| Blue Jay (105)              | Blue Jay (135)               |
| American Goldfinch (103)    | Black-capped Chickadee (103) |
| Black-capped Chickadee (79) | American Goldfinch (78)      |



The top four species are identical for both survey years, but the American Goldfinch and Black-capped Chickadee exchanged places.



Scarlet Tanager © C. H. Warren

American Robin © Dave Lewis



| White-breasted Nuthatch | 46 | (38) |
|-------------------------|----|------|
| Acadian Flycatcher      | 42 | (49) |
| Scarlet Tanager         | 31 | (16) |
| Hooded Warbler          | 26 | (45) |
| Yellow-billed Cuckoo    | 11 | (5)  |
| Ovenbird                | 7  | (20) |
| Prothonotary Warbler    | 4  | (0)  |
| Blue-winged Warbler     | 4  | (5)  |
| Pine Warbler            | 2  | (0)  |
| Louisiana Waterthrush   | 0  | (2)  |
| Cerulean Warbler        | 0  | (1)  |
|                         |    |      |

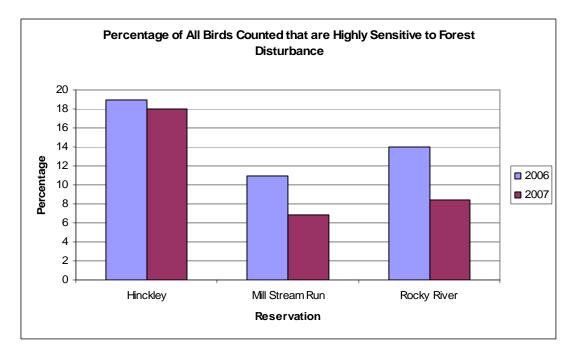
Others- all add to the diversity

Some species prefer forest or woodland habitat, and some of these are more sensitive to disturbance than others. This table shows the fluctuation in count numbers for species that may be useful indicators for tracking the health of the Rocky River IBA.

## **Analysis of Our Findings**

| Species                 | <u>Habitat</u> | <b>Sensitivity</b> |
|-------------------------|----------------|--------------------|
| Acadian flycatcher      | Forest         | High               |
| American goldfinch      | Field          | Low                |
| American robin          | General        | Low                |
| Black-capped chickadee  | Woodland       | Low                |
| Blue jay                | General        | Low                |
| Blue-winged warbler     | Field          | Low                |
| Cerulean warbler        | Forest         | High               |
| Hooded warbler          | Forest         | High               |
| Louisiana waterthrush   | Forest         | High               |
| Northern cardinal       | General        | Low                |
| Ovenbird                | Forest         | High               |
| Pine warbler            | Forest         | Medium             |
| Prothonotary warbler    | Forest         | Medium             |
| Red-eyed vireo          | Forest         | Medium             |
| Scarlet tanager         | Forest         | High               |
| White-breasted nuthatch | Woodland       | Low                |

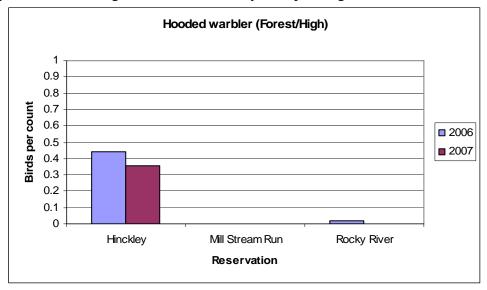
To assist with analysis, species were classified as to their preferred habitat and their sensitivity to disturbance. For example, ovenbirds are termed forest interior birds that need large blocks of undisturbed, continuous forest to reproduce successfully. On the other hand, Northern cardinals are generalists that live comfortably in urban and wooded environments and tolerate high levels of disturbance. Monitoring birds of all groups will help us understand habitat changes in the Rocky River IBA.



While analysis with only two years data is very preliminary, some expected trends do seem to be appearing. This graph shows the proportion of highly sensitive forest birds detected (within 50 meters) as a percentage of all birds observed. There is an indication that a greater proportion of birds with high sensitivity to disturbance are found in Hinckley Reservation compared to Mill Stream Run and Rocky River reservations. Hinckley Reservation has a greater proportion of forest interior habitat (versus forest edge or disturbed).

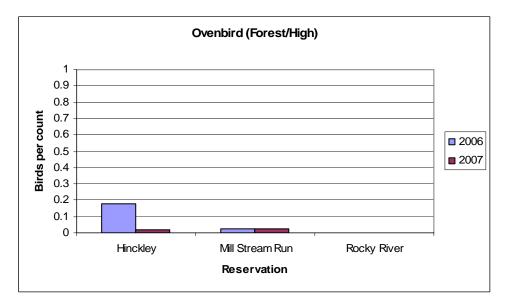
# **Analysis of Our Findings**

The following graphs depict the average number of birds for a particular species detected per 10 minute point count (within 50m) in each of the three reservations. Again, this data is preliminary in nature, and rigorous statistical analysis is pending.

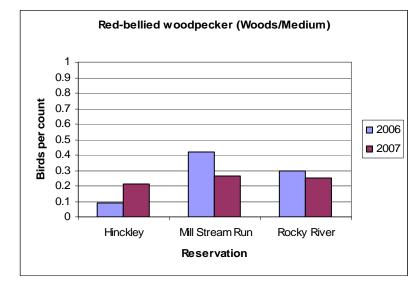


These two graphs indicate that Hooded warblers and Ovenbirds, which are species that prefer forested habitat and are highly sensitive to disturbance, are observed more frequently in Hinckley Reservation where there are more contiguous forests and fewer roads, fields and development than the other two reservations.

However, the yearly and geographical variation in detection rates is notable because it tells us that longer term data collection is needed to quantify true population changes in these more infrequently encountered species.

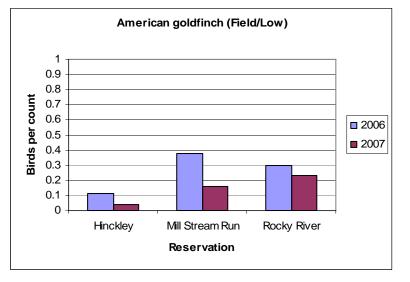


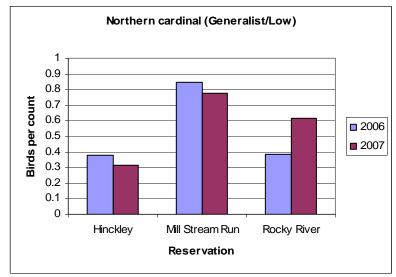
# **Analysis of Our Findings**



Species that are less sensitive to disturbance seem to be encountered more often in all of the reservations. The Redbellied woodpecker and American goldfinch are examples of species that are commonly found throughout Cleveland Metroparks

Mill Stream Run and Rocky River reservations, with more edgy and open areas than Hinckley Reservation, seemed to draw slightly greater numbers of Red-bellied woodpeckers and American goldfinches.





Northern cardinals, one of our most abundant species, were generally detected more frequently in Mill Stream Run and Rocky River reservations. Studies at Ohio State University indicate that cardinals are a species that has adapted well to disturbed habitats.