## Data Collection for Small Organizations Dick Blaine, Director, California Bluebird Recovery Program. January 2012

Many NABS affiliates and Bluebird/Cavity Nesting organizations collect and consolidate nesting data from trail monitors who check their nestboxes periodically during the nesting season. I am writing this article to share a method I have found which would allow trail monitors to enter data on-line using their web browsers and which will update and consolidate the data into a spreadsheet which is downloadable and sharable.

This approach simplifies, expedites and automates the collection of data from trail monitors without having to fill out and mail or scan paper forms, provide to county coordinators who, in turn, consolidate results and then provides consolidated results for the organization.

The Cornell Nest Watch program collects such data from trail monitors who enter data directly into their database. From the inception of CBRP in 1996 thru the 2005 season our network of county coordinators collected paper forms species-level data from trail monitors, summarized these into county reports which in turn were consolidated into a California (CBRP) report. From 2006 thru the 2011 nesting season the California Bluebird Recovery Program (CBPR) has collected data from our 150 or so trail monitors into our homegrown on-line, interactive database. Both of these databases store nesting results at the box-by-box level; i.e., for each box we gather the dates of first egg, first hatch and fledge as well as the number of each for that box - in addition GPS and/or ZIP information is recorded along with information about the monitor and trail. We expect that these six seasons of data will be incorporated into the Nest Watch database at Cornell sometime in 2012.

This year our database developer will be retiring; since we have not been able to find another interested individual with the requisite skills, we are planning to return to use another on-line data collection technique. I have reviewed a variety of software for collecting and sharing data "in the clouds". I looked at Google, Microsoft and other free cloud data storage and processing software/web sites which allow multiple users to share data on-line. These allow trail monitors to enter data using their web browsers but all suffer from lack of protection against accidental or purposeful corruption of the spreadsheet by other users. There are other annoyances with this approach such as having to maintain logon and password information.

CBRP has decided to return to collecting species-level data rather than box-level data. Many of our trail monitors have 100 or more boxes on multiple trails and find that entering this data at the box-by-box level to be overwhelming and, as a result, do not enter any data. After reviewing the needs of our organization we have decided to return to collecting species-level data with the awareness that we will not be collecting valuable information but we feel that more trail monitors will report their data. Trail monitors who are willing can, in addition, enter their box-by-box level data into Nest Watch.

I have found that on-line survey sites offer software which satisfies most of our needs for data collection. No user can modify the data entered by another, no passwords are required, they are free (some ads), accumulate entries into to an excel spreadsheet, are easy to work with and are expandable.

The software we plan to use in the future is the Kwik Survey web site. They are well established and appear to be reliable. Link to http://www.kwiksurveys.com/ to see the web site. If anyone is interested I would be happy to share information as to what we did and provide a link to a preliminary survey we plan to use starting in the 2012 nesting season. In fact I can provide a version of the survey we will be using. Contact me at cbrp@theblaines.net if you would like more information.