The Body Grasp Technique: A Rapid Method of Removing Birds from Mist Nets

C. John Ralph
U.S. Forest Service, Redwood Sciences Laboratory
1700 Bayview Drive
Arcata, California 95521
cjr2@humboldt.edu

ABSTRACT
Safety of birds is paramount to our efforts in monitoring birds. I describe a method that has the potential of greatly increasing the speed and safety of extracting birds from mist nets. This method involves removing the feet last, as opposed to the more traditional 'feet first' method. The "body grasp" method involves slipping the fingers around the body of the bird, underneath the encumbering net, and then lifting the bird out of the enfolding layers of netting, focusing on the bird's body, not on the tangle of netting that its feet have made. In instructing many people in this method, I have found a great reduction in learning time, as well as an increase in safety of the birds.

INTRODUCTION
In the last 30 years, mist nets have become the most common method of capturing landbirds in North America and elsewhere (Ralph and Dunn 2004). Previous publications have illustrated the methods of removing birds from these nets (e.g., Low 1957; Bleitz 1957, 1970; EBBA Workshop Manual 1963; Bub 1991; McClure 1984:26-27; Redfern and Clark 2001:118-119). The primary method described involves disentangling the feet first. I have observed many hundreds of banders extracting birds, and in the vast majority of cases the birds were extracted by the feet first method. Many, if not most, banders occasionally use some variation of the "body grasp" method described here. However, this extraction method can, and perhaps should, be used on the vast majority of birds extracted.

METHOD
Whereas the traditional method of extraction begins with the feet for most situations, in the body grasp method, the feet are usually the last to be removed.

I already very briefly described this more rapid extraction method that involves disentangling the feet last (Ralph et al. 1993:11; NABC 2001:19). We term the technique the "body grasp." In teaching this method to more than 200 people in the last several years, my colleagues and I have found that complete understanding of the method requires a much fuller description and discussion than given previously.

I first came to use the body grasp method routinely when more and more of my own extractions were by a derivation of the method usually used when birds were just lying unencumbered and belly down in the net pocket. I also found that with more use of the new method, the time that it took me to remove most birds had become extremely short. We since have found that the very great majority of birds can be removed rapidly by this method, and also that it enables novices to learn to extract birds more easily. While the competent bander should develop a proficiency in all of the net extraction methods, the body grasp has the potential for being the most useful in most instances.

Three elements are crucial to the body grasp method.

1. The first element, in common with all
extraction techniques commonly used in North America, is to get the bird supported as rapidly as possible in the "bander's grip," where the forefinger and middle finger are on either side of the neck, the palm is against the back of the bird, and the thumb and other fingers are wrapped around the body.

(2) Secondly, critical to the body grasp method, as the bird is extracted, it is always grasped with the fingers between the net and the bird's body. That is, as the bander slips the fingers over and around the bird (Figs. A and B), one always makes sure to slide the fingers under the net, so that when the bird is grasped, no net is under the fingers. This ensures that the bird will come free rapidly.

(3) The third element is that, after the bird is grasped safely, the bander must lift the bird and remaining entanglement of netting out of the pocket and away from the net quickly (Fig. C). This often enables the bird's normal struggles to free it from the folds of the net, especially from around the wings and head. Further, as the bird is pulled gently away from the net, the feet, usually the most tangled portion of the bird, sometimes free themselves. This is a result of the feet being reflexively relaxed as the legs are stretched out and extended, allowing the net to slide off more easily.

This method of extraction is accomplished by one of two basic approaches below, depending upon how the bird is entangled in the net.

Determine how entered.—First, as in any extraction method, the bird has to come out the same way it went in, so it is critical to identify correctly the entry route. As with other methods, to do this the bander carefully parts the folds of the tier of net above the bird, and looks into the pocket formed as the bird hit the net. If the opened pocket does not reveal a clear view of the bird, pulling some threads on the lower tiers of net, while holding the bird's tier taut, may clarify the situation, and may even free the bird of some threads. When the bander can see some part of the bird without net in the way, then the entrance has been found, and thus the exit for extraction. (Often, the motion of parting the netting away from the bird frees it partially or completely of entanglement. Swift and sure control of the bird at this moment is necessary to prevent re-entanglement.) Then the bander should determine if either the 'direct' or 'side' approach should be used, as detailed below.

Fig. A. A bird lying belly down in the net and the fingers sliding down the body to begin to encircle it.
**Direct approach.**—In the simplest entanglement, the bird is simply lying in the net pocket, unencumbered by threads, usually with its belly down. While I would estimate that only about 10% of the birds are captured in this fashion, this extraction is instructive as it illustrates the basic approach to the body grasp method. With this entanglement, the bander should move quickly into the "bander's grip," placing the two fingers along the sides of the neck and the palm over the bird's back. Then firmly and gently grasp the body by sliding and curling the thumb and remaining fingers around the bird. Finally, lift the bird out and away from the net.

**Side approach.**—More commonly, the bird presents a side view to the bander, with the head and wings often tangled in netting. The objective here is to grasp just with the fingers, around the body and under the wings. In this 'side approach', one slides usually three or four fingers carefully under the wings and along the back and belly, starting from just forward of the tail and moving the fingers forward, towards the front of the bird. The fingers should move through the body feathers and then around and over the curve of the body, making sure there are no net threads under the fingers. Once the fingers have firmly (and gently) encircled the body with the fingers touching the body, and with the net and wings outside of the fingers, the bander begins to back the bird out and away from the net to expose one wing. If there is resistance from the strands, one wing usually can be freed by gently flicking the netting from the underside of the wing, up over its bend. At this point the bird is usually completely free on one side and can be rotated or slid into the bander's grip if the bander wishes. Since the neck usually will still be entangled, the fore and middle fingers should be kept somewhat to the rear of the neck so that the fingers remain between the body and the net strands. Then the bird should be lifted farther out of the net pocket and away from the net (Fig. C) in order to free the other wing and the head (Fig. D) and finally the legs and feet.

![Fig. B. The fingers in a direct approach moving the bird into the "bander's grip."](image-url)
Fig. C. The bird being backed out of the net. Note that the thumb is under the wing, so that the net can still be pulled off.

Fig. D. Pulling the net off the bird. The bird's head has gone through a mesh opening, and the bander is using the thumb as a fulcrum and pulling the net over the head as in removing a sweater. The feet will be freed last.
In some captures, after much examination of the possible entrance paths, one finds only the tail protruding from among the many folds of the net. In this more difficult case we have found that the bander should put the fingers in towards the side of the bird, starting from the tail; slide the fingers along the body, either over its top or bottom (or both); gently pluck at the strands of the pocket above the bird to assist in freeing the net; then slide the fingers up over the breast and back; and finally lift the bird out of the net.

Feet entangled.—In this relatively rare case, the bird has fallen into a fold of the net, but on its back, with its feet uppermost. In attempting to get a grip, the bird has effectively zippered shut the mouth of the pocket with its claws. This sometimes makes it very difficult to use the side approach and get at the side of the bird to slip the bander’s fingers around the body. When a bird is caught in this fashion, it is sometimes quicker to revert to the ‘feet first’ method for the first step. In this, I suggest disentangling only one foot before proceeding with the side approach, as described above.

A note about blowing.—Often banders can be observed blowing the feathers of an entangled bird to see where net strands are wrapped, usually about the bend of the wing, but also elsewhere. We have found that it is far quicker, and thus better for the bird, to tug gently instead at the strands of net. Gently tugging on the exposed portions of the still-tangled threads can result in freeing the strands, or it can, by moving the feathers, show the bander where the strands are actually caught. A thread that seems to be around the bend of the wing actually may be wrapped closer to the body and also around the neck. Slipping the threads up over the neck first can result in a more rapid extraction and relieve potential distress of the bird. This is information that blowing would not have produced until later in the extraction process.

RESULTS AND DISCUSSION

The major benefit of the method is its rapidity. We have timed the removal of more than 200 birds from nets by trained banders, and the typical (modal) time was less than 10 seconds (pers. obs.). Using the feet first method, the modal time was more than one minute. Extracting a bird rapidly results in far less stress to the bird. This should be the aim of any person involved with capture of birds, as the Banders’ Code of Ethics (NABC 2001) states. A second important benefit is that the birds’ legs are not gripped during the extraction process. Holding birds by the legs puts an unnatural strain on them, especially if the bird struggles, possibly resulting in severe injury. By contrast, the body grasp method avoids the appendages, holding the entire body secure without strain.

Banders who are used to the more traditional ‘feet first’ method likely will find themselves reverting to their more familiar method. They should notice, however, that extraction time is often prolonged with the feet first method. Spending many seconds freeing a foot, only to have the bird grasp the net again, takes up valuable time. By contrast, with the body grasp method, the feet often come free of their own accord. Further, injuries to legs are greatly reduced, since most birds are not held by their legs.

We have found that teaching an experienced bander the body grasp technique involves the extraction of about 20 birds. The time to teach a novice bander varies, but we estimate it takes about half the time of the feet-first method, since banders get confident more rapidly as most birds came out of the net quickly and with less stress.

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Updates to Four-letter and Six-letter Alpha Codes based on Revisions by the American Ornithologists’ Union

Pyle and DeSante (2003) derived alpha codes based on the English and scientific names of 2030 species recorded in the American Ornithologist’s Union (AOU) 1998 check-list and supplements through 2002. They also derived codes for 91 non-species forms including subspecies, unidentified taxa, intergrades, morphs, and hybrids. Four-letter codes, based on the English name, largely coincided with those utilized by the Bird Banding Laboratory for use on banding schedules. Six-letter codes, based on the scientific names of these taxa, are used primarily by ornithologists in Latin America. These lists can be downloaded from The Institute for Bird Populations web site at http://www.birdpop.org/AlphaCodes.htm.

Since these lists were derived, the AOU has revised their taxonomy and nomenclature in two supplements (Banks et al. 2003, 2004). Here we list all changes to the alpha-code lists (English name, four-letter code, scientific name, and six-letter code) based on these revisions by the AOU. We have also corrected four errors to the previous list and added five unidentified-species taxa based on entries to point-count data collected by The Institute for Bird Populations (IBP). We publish this list for those who have already incorporated the old list into their databases and would find it easier to make these corrections than to download the revised list. The revised list (through 2004), incorporating the following changes as well as the new taxonomic order, is now available at the above web site.

We thank Nicole Michel and Bob Wilkerson for assistance in providing and maintaining the lists on the web site and Ken Burton for pointing out errors to the previous list. This is Contribution # 267 of The Institute for Bird Populations.