APPENDIX C

RED-COCKADED WOODPECKER DEMOGRAPHIC MONITORING PLAN

Red-cockaded Woodpecker Demographic Monitoring Plan

A monitoring strategy for clusters impacted by BRAC/Transformation actions on Ft. Benning.

This plan discusses monitoring procedures designed to assess the impacts of Transformation actions, especially the Base Realignment and Closure (BRAC), to Red-cockaded woodpeckers (RCW) on Ft. Benning. Specifically, this document satisfies the U.S. Fish and Wildlife Service (USFWS) requirement for a 'RCW Demographic Monitoring Plan' for groups potentially affected by Transformation actions. Consistent with paragraph 6 of the 'Reasonable and Prudent Measures' outlined by the USFWS in their 20 August Biological Opinion (BO), this plan and its implementation meet the non-discretionary requirements presented in 'Terms and Conditions' paragraph 7.

Proposed Action

As mandated by Congress, the U.S. Army is currently undergoing a reorganization and redistribution effort which involves the BRAC process. Many of the activities associated with this transformation will occur within the boundaries of the Ft. Benning Army Installation. One of the largest of these actions involves moving the Armor School from Ft. Knox to Ft. Benning. Under the proposed action, the Army would provide the facilities, infrastructure and equipment needed to support this transformation and the associated influx of soldiers and training as a result. In addition to upgrading cantonment areas, the Army will also conduct upgrades to existing training ranges and roads as well as construct numerous new ranges and tank trails throughout the Installation.

Pursuant to section 7 of the Endangered Species Act, Ft. Benning's Conservation Branch (FBCB) conducted a thorough Biological Assessment (BA) to determine the possible impact these BRAC actions may have on the environment and various plant and animal species. The assessment determined that the actions were likely to adversely affect, among other species, the resident RCW population, but not jeopardize its continued existence on the Installation. The assessment also described current, on-going and future monitoring and management criteria that will ensure survival and persistence of this species (Ft. Benning, 2007).

The Red-cockaded Woodpecker

In 1970, the USFWS listed the RCW as endangered (Federal Register 35:16047), and in 1973, the passage of the Endangered Species Act provided federal protection for this endangered species. The major component in the determination to list the RCW was the documented decline in local populations and massive reduction in foraging and nesting habitat. Today's population represents less than 3% of what was present in pre-colonial America (USFWS, 2003).

The RCW is a territorial, non-migratory, cooperatively breeding species (Lennartz, 1987). Breeding pairs are monogamous and produce broods of 1-4 fledglings per year. Many groups also support one or more 'helpers', which are usually the male offspring from the pervious season. The remaining offspring typically disperse an average of two miles from their natal cluster within their first year.

Historically, the RCW occupied a wide range throughout old-growth, fire-maintained pine ecosystems of the southeastern United States. Although still widely distributed, the range of the RCW is now limited and fragmented as a result of timber clearing for agriculture, fire

suppression, natural disasters, and disease. The RCW is the only North American woodpecker that excavates its roost and nest cavities exclusively in living pines, thus the habitat and cavity trees are both limiting factors for the RCW (USFWS, 2003).

RCWs on Ft. Benning

In September 1994, the USFWS issued a Jeopardy Biological Opinion (JBO) to Ft. Benning which concluded that ongoing military training, timber harvest and construction activities on would "jeopardize" the continued existence of the Installation's RCW population. Since that time, intensive management activities have increased the habitat and improved conditions for the RCW in an effort to recover the species and comply with USFWS requirements. In 2002, Ft. Benning received a BO for the Endangered Species Management Plan that was non-jeopardy for the RCW.

Currently, Ft. Benning supports 306 manageable RCW clusters with 262 Potential Breeding Groups (PBG). PBGs consist of one male and one female with or without helpers that may or may not successfully fledge young. Due to the social dynamics of the RCW, referencing the number of PBGs is a more accurate measure of population size than the number of individual birds or clusters. The USFWS has mandated a goal of 361 PBGs to meet recovery criteria.

The Army complies with federal policy through employment of the Endangered Species Management Plan, an extensive plan which includes guidelines for species surveys, monitoring and data collection for the RCW as well as resource and habitat management and rehabilitation. U.S. Army Infantry Center Regulation 210-4 provides protocols specific to training activities near RCW clusters on Ft. Benning.

Monitoring BRAC/Transformation Impacted Clusters

The major threat to the RCW as result of BRAC/Transformation action stems from the direct loss of foraging habitat and cavity trees. Other threats include habitat fragmentation, interruption of natural dispersal and interference with reproductive success due to increased harassment in the form of soldier activities such as maneuver training and the noise resulting from gunnery firing.

Monitoring Criteria
As mandated by the USFWS 20 August 2007 BO, Ft. Benning will monitor 100% of the RCW clusters impacted by BRAC actions. Impacted clusters are those clusters whose cavity trees are within 200' of road projects and/or within 0.5 miles of a proposed Transformation project as well as all clusters experiencing habitat loss from within their foraging partitions as a result of any project. Monitoring will include banding all adults and nestlings in the cluster and will be conducted for five years after project completion and/or training initiation.

FBCB will employ the monitoring and management practices outlined through Army guidelines and the RCW Recovery Plan for BRAC/Transformation impacted RCW clusters on the Installation. The attached memorandum for record (Enclosure 1) describes Ft. Benning's protocol for these activities in detail. The current monitoring plan implemented on Ft. Benning meets the monitoring requirements outlined in the 20 August 2007 BO. Monitoring protocols involve determining the group composition and reproductive success of the population through the use of color band identifications and regular nest and fledge checks throughout the breeding season.

In the BA for the BRAC actions, Ft. Benning requested permission for the Incidental Take (i.e. elimination) of 32 RCW clusters as a direct or indirect result of Transformation activities. Although 'taken', those clusters not removed from the landscape will continue to be managed according to the Army RCW Guidelines (Ft. Benning, 2007).

Continued Management of Eliminated Clusters

Analysis presented in the 2007 Biological Assessment (BA) determined that, of the 32 clusters granted take, 14 may still have the ability to reach the RCW Recovery Standard for habitat totals in the future. The USFWS mandated in their 20 August 2007 BO that none of these clusters should be deleted from management. "Continued management of these clusters may result in the perpetuation or reformation of groups and allow these sites to be counted towards the Installation population goal. Many of these clusters can play a role in maintaining demographic connectivity and continue to contribute fledglings for overall population stability and growth" (USFWS, 2007).

FBCB acknowledges that clusters will become inactive or activate over time. The specific clusters to be monitored on an annual basis will be provided to the USFWS in the required quarterly reports as outlined in the terms and conditions of the 20 August 2007 BO.

Future Monitoring

The analysis performed for the BA took into account project information current as of January 2007. The BA discussed impacts to 91 active and inactive RCW clusters on Ft. Benning. In order to satisfy the terms and conditions as outlined by the USFWS in their 20 August BO, FBCB re-assessed impacts to clusters due to their proximity to proposed roads and projects and identified additional clusters which will require demographic monitoring.

Since final submittal of the BA analysis and BO response, numerous proposed projects have changed in scope, location and design. For this reason, FBCB will re-analyze impacts for each project as the design phase progresses. Re-analysis of project footprints and scope of training events may determine that clusters are experiencing new or additional impacts or that clusters originally anticipated to experience impacts will no longer be affected. Due to the fluid nature of Transformation/BRAC actions, Ft. Benning anticipates that there may be changes to purposed projects which will necessitate revision to this plan over time.

Summary

In summary, Ft. Benning will monitor and band 100% of active impacted clusters annually. FBCB will monitor impacted groups following established protocols as outlined by the USFWS and Army guidelines. RCW demographic monitoring will provide valuable data with respect to the impact of large scale construction and range operation on the population. Thorough monitoring will also allow Ft. Benning to detect and react to unexpected impacts from proposed actions to the RCW population. Ft. Benning anticipates alteration of this monitoring plan over time to reflect changes in both population activity and in proposed BRAC/Transformation actions. If monitoring identifies unexpected impacts, Ft. Benning will consult with the USFWS to determine the appropriate course of action.

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SUBJECT: Red-cockaded Woodpecker Population Monitoring and Banding

A. Introduction

The Monitoring Program is setup to determine population trends, reproductive success and response to management and military activities, as well as banding birds for translocation purposes. This includes annual inspections of all clusters and banding of adults and nestlings in the 25% sample clusters and all active recruitment clusters (for five years after activation). All sample clusters and recruitment clusters are also visited during the breeding season to determine if breeding is occurring in these sites (recruitments clusters for five years after activation). This will provide an accurate picture of breeding success at Fort Benning. Non-monitoring clusters will be visited until the composition of the site is determined. The easiest and preferred way to determine the presence of a potential breeding pair is to document a nest. In clusters where no nest can be found, the effort must be made to determine if there is a potential breeding pair that has not nested, if it is a single bird cluster, or if the cluster is captured. Once this determination is made, the cluster does not need to be checked any further for breeding.

The 25% sample clusters were randomly selected from the total active clusters. Clusters in the A20 and K15 impact areas are not included in the population monitoring due to access limitations, except for three clusters in A20 that have been cleared for management by EOD.

Data from the breeding season will be used to determine breeding success and also to determine the best sites for recruitment clusters for that year. This will also provide for a pool of birds for possible translocation efforts for that year.

All recruitment sites will be visited during the breeding season and again in the fall of each year. As clusters are activated, all adult and nestlings will be banded. Occupied recruitment clusters will be monitored for five years. Data on military activities in these sites will also be documented.

Annual reports of all activities will be submitted as required.

All written data that is collected should be recorded in black ink and be clear and legible. If not, data will be returned and you will be asked to redo data sheets.

B. Nest Checks

Each cluster should be checked for a nest about every 7-10 days, with no more than 11 days between checks. There should be only one nest per cluster, but until a nest is located, each active cavity must be considered a potential nest site. Nests are typically in the most active cavity, and often in the most recently completed cavity. However, at the beginning of the breeding season some nest cavities show only moderate activity. Pay special attention to the previous years nest cavity. Birds will on occasion reactivate a tree to use as a nest tree. This most often occurs with renesting attempts. Always pay attention to previously listed inactive cavities/trees in clusters that have not nested or have failed.

Most nests can be found by scraping loudly with an axe handle/rake on the tree to flush the incubating adult. However, some birds will lean out to see what is going on and may be difficult to see. Use the peeper to check cavity contents whenever a RCW is flushed. The only way to conclusively document a nest attempt is to observe RCWs brooding eggs/tending nestlings. Therefore, in order to document a nest in a non-monitoring cluster, the technician must observe/flush an adult RCW from a nest or document nestlings. During every other nest check cycle, all active cavities should be peeped in sites where no nest has been found. If no nest is found by the middle of the breeding season, conduct a morning follow of group members to determine group status. The target group should be observed for a half an hour to an hour, immediately after the birds exit their cavities in the morning. Also check all cavities previously listed as inactive as it could have been reactivated and become a nest tree. Group status is classified as (1) potential breeding group, indicated by two or more birds that remain together and peacefully interact, (2) solitary bird, indicated by a bird that remains solitary for the duration of the follow, or (3) captured cluster, indicated by no birds or a bird that roosted in the target cluster but joined a neighbor group. If doubt as to the group status exists, the follow time is extended or the follow is repeated on another day. Also, survey the surrounding area (up to 1/4 mile) for new cavity trees. Any active tree more than 150 m from a nest tree should be checked for nests even when it is grouped with a cluster containing a nest (two nest trees within sight of one another are not unusual). Once eggs are found, return to the nest in 8 days. If you find the same number of eggs, check again in 8 days. If there are more eggs when you return, check again in 9 days. If chicks are found, the next check is scheduled by the optimal banding age (7-9 days old). Nestlings should be aged beginning with Day 0 (see handout). If it is necessary to band nestlings that are younger than 7 days old, it may be necessary to file down the bands in order for them to fit on the leg. If this is done, the band that is closest to the foot should never be filed as this may still result in a toe hung situation. Return when the nestlings are 18-20 days old to determine sex of nestlings. No nest should be peeped if the nestlings are 21 days or older as this may cause premature fledging. During these visits, adults should be identified. If a nest fails before fledging, that site must be put back into the nest check cycle. Check for nests through July. Continue to monitor sites after fledging for possible second nest. Each active tree should be peeped every other visit as sometimes adults will not flush when tree is scraped. This will ensure that a nest attempt is not missed. Make sure to scrape or lightly bang on each tree before inserting the peeper. This will give any roosting bird a chance to flush from the cavity. Mortality has been documented due to birds getting pinned by a peeper, so be cautious when inserting a peeper. Peepers should only be used one hour after sunrise and one hour before sunset.

Flag each nest tree found in banding clusters. This is not necessary in non-banding clusters.

Notify the Monitor/Survey Biologist once banding as soon as completed in a cluster. This may be done via email or a note given to the Biologist. Indicate the cluster(s) banded and the date banding occurred.

Data taken during the nest checks are recorded on nest check section on the pentabs. There should be one sheet for each cluster. It is extremely important to record the number of adults observed during nest checks. Pursue adults to identify if time permits. Never assume you will be able to identify the bird at a later date. If

adults are observed, record number of adults and band information on nest check sheet/band ID sheet. Note number of unbanded birds. These birds will have to be caught and banded after the breeding season concludes for that cluster. Adults can be captured two weeks after nestlings fledge as long as a second nest is not discovered.

Inactive clusters should be revisited once every three weeks, as clusters have been known to become activated during the breeding season and produce nests. Inactive clusters that do no have any suitable cavities do not need to be put into this rotation.

Weekly reports of nesting activity should be turned in. Reports are prepared as an EXCEL file. The form is located on the P-drive under shared folders, Nest reports and should be filled out by COB each Monday. You should use the filter button to find your sites and fill in as needed. Turn off the filter when finished. Fill in as per the handout.

C. Climbing Trees

Swedish ladders are a safe and efficient way to climb trees, but it takes time to develop confidence and speed. Base sections must be fastened securely parallel to the trunk. Additional sections can be handed up to you or carried over your shoulder. Sections can be lowered in the same ways. Sometimes sections must be dropped if ladders will not come apart. Do this only if necessary and try to break the ladder's fall by dropping it in some brush. Never stand under a tree when someone is putting on or taking off sections. Use a safety belt at all times. Chain extensions or bungees can be used if the tree is too big for the chain on the ladders. Always keep the chain tight. Trees that are very large, lean, or have limbs below the cavity present special problems-consult a biologist if you have questions.

D. Nest Check Data Sheet

Section to be revised per use of tablet computers.

E. Banding Nestlings and Adults

Once nestlings are discovered and aged, plan the next nest check so that the young are the ideal age for banding. Begin with Day 0 for aging purposes. The object of the capture procedure is to place a monofilament loop over some part of the bird, ideally the neck, draw it tight, and gently pull the bird from the cavity. Capturing nestlings with a puller requires patience and experience. Keep pullers clean at all times. Use of cornstarch keeps the filaments lubricated. Make sure all loose cornstarch is tapped away as it could harm nestlings by clogging their respiratory tract. Nestlings are captured and banded between day 7 and day 9. Banding nestlings older than 10 days old is prohibited. Nestlings of this age are not easily hurt regardless of where they are snagged since their bones are not fully ossified and feathers have not erupted. Only trained personnel capture nestlings. Each nestling is to be banded with three color bands (representing the cluster) on the right leg, and a color band and a USFWS silver band (representing the individual) on the left leg. It

may be necessary to band nestlings that are younger than 7 days old. Because the legs are shorter at these ages, it may require that the bands be filed in order for them to fit on the leg. If this is the case, the band that is next to the foot should never be filed as this may result in a toe hung situation.

While their eyes are closed (up to 8-9 days), nestlings respond to shadows across the cavity entrance by begging for food. This makes them fairly easy to catch by placing a hand over the entrance as you insert the puller. Nestlings become harder to catch as they get older and once their eyes open. They may "spook" and flatten against the bottom of the cavity. You must work a puller loop under them or hope to snag a wing or head.

Nestlings must be kept warm and dry by placing them in a pouch once pulled. Leave the puller in the entrance cavity to deter adults from entering the cavity once nestlings are pulled. Do not drop or leave them in direct sunlight. Record any injuries on nest check sheet. Band and weigh the nestlings on the ground in a clear, shaded area. Weigh each nestling using bag and pesola scale. Make sure to subtract the weight of the bag to get nestling weight and record on banding sheet. Be careful when applying bands, especially aluminum bands (always put on last). If a band is not opened properly, it may close lopsided, crushing or cutting the leg. Such bands are difficult to remove. Record any injuries on nest check sheet. Before banding, make sure you have the correct band colors, and that the individual colors you are choosing have not been used before. This can be determined by checking the colors used for the site in the banding section. After banding and weighing, check the bands for correctness and make sure you recorded all information correctly. It is very easy to band a bird wrong. Nestlings should be returned to cavity rear end first.

Adults are banded in the same manor, with three color bands on the right leg and one color band and one USFWS band on the left leg. These combinations are found on the banding section on the tablet computers for each cluster. Once captured, take the bird back to the vehicle for banding or to where ever banding equipment is located. It may be necessary to carry banding equipment to a particular tree. When banding adults, the bird should be held with forefinger and thumb forming a circle around the neck and the other fingers supporting the body. Color bands are applied first and the USFWS band last. Always double-check to make sure bands were applied correctly. Adults are weighed and released. Care should be taken when releasing the bird to let the bird go so that it will fly into a forested area. Never let the bird go in an opening. Also, pay attention to the possibility of predators in the area. Hawks have been known to snatch a bird right after it was released. A bird can also be released by placing it directly on to the bole of a pine tree. If a banded bird is recaptured, note combination and USFWS number and immediately release the bird. Replace faded color bands or bands that have fallen off as necessary. Sappy USFWS bands can be scraped clean using a band applicator. Extreme care should be taken when removing bands. Legs can easily be injured or broken.

A single person may raise up to 2 poles on their own as long as the trees are reasonably close together. One pole should be manned and the other attached to the tree using bungee or some other means to secure the pole to the tree and the net must be a closure-type net. All poles with extensions must be manned. If ladders need to be used to catch a bird, there must be 2 people present.

Unbanded adults may be caught and banded 2 weeks after a nest fledges or July 1 for clusters that do not nest or have failed and not renested by this date.

F. Banding Sheet

Section to be revised for tablet computer use.

G. Rechecks

One recheck should be scheduled to determine sex of the nestlings. This check is done at day 18-20. Peep the nest tree and look for a red patch on the head of nestlings. Males will have the patch and females will not. Record the number of each sex observed. If the nest has failed, then the cluster is put back in to the nest check rotation. Do not peep a nest if the nestlings are 21 days or older as this could cause premature fledging. A second check may be done around day 15 to determine if nestlings are still present or to identify adults, but this check is not mandatory.

H. Fledgling Checks

RCW's usually fledge about day 26-29. Fledging checks should be scheduled as close to these days as possible. Ideally, we would like to see the birds when they first leave the cavity. The longer the fledge check is delayed, the greater the chances some or all fledglings might die before this check. If all potential fledglings in a cluster are not found in the first check, the cluster must be checked again. There are several reasons fledglings may be missed. They often remain frozen in the treetops during their first days after leaving the nest, and can be difficult to impossible to find at this time. Listen for begging sounds when adults enter the area and watch where the adults go. The fledglings are much easier to observe when they begin moving with the group. Still, fledglings may be left some distance from the cluster at roost time. Adults will fly directly back to them when leaving the cluster in the morning and can often be found by following adults at this time. Try to identify all birds in the cluster by band identification. Record all data on the recapture/visual id data section. Spotting scopes are used to identify fledglings.

I. Adult Observations

Adults should be counted and identified whenever encountered. This information should be recorded on recapture/visual id data section. One of our major goals is to determine the number and identity of all group members in each cluster, especially during the breeding season. All adults in a group are rarely at the nest at the same time unless there are only two birds. The group usually moves as a unit after fledging, though a weak bird may lag behind. Large groups may split into subgroups. Do not assume that a bird will be seen again or that adults seen at a nest tree are the same ones with fledglings (sometimes they are not). Record only the number of adults you are sure of. You can indicate the possibility of additional adults in the comments. Do not look up band colors on birds expected to be in an area, it is very easy to see bands you expect to see. Spotting scopes are used to identify adults.

Make sure to do adult ids in active monitoring and recruitment clusters that do not nest. It is important for translocation needs to determine if a cluster contains a potential breeding pair or a single bird.

Also, in non-monitoring clusters where no nest is found, a determination must be made as to whether there is a single bird or a potential breeding pair. This is necessary to determine translocation needs for the fall.

J. Capturing Adults

Adults are captured either at sunrise or sunset. If capturing at sunrise, areas that must be scheduled should be scheduled for two consecutive days. Banding is done only if temperatures are above 40 degrees F. The extension poles must be set up in advance because it is hard to make sure the net is over the cavity when it is dark. You must arrive at the cluster before sunrise as most birds leave their cavities when the sun rises. A few have been known to flush when it is still dark. It is very important that you are quiet when entering the cluster and when you are raising the pole. Loud noises can cause the bird to flush. Be sure to park the vehicle far enough away from the cluster so as not to flush the birds. Turn lights off once you enter the cluster. If capturing at sunset, watch the active trees and see which cavities the birds enter. Poles are set up at as many active trees as can be observed. You must get your net over the cavity within minutes after the bird enters the cavity. Play tape or scrape tree to get the bird to flush. In many cases, if you wait too long, the bird will not flush. If you do not have enough time to capture and band the bird before it gets dark, do not continue to try and capture the bird. It must be light enough for the bird to find its cavity after being banded. If a bird has to roost outside, it is more vulnerable to predators and severe weather.

When setting up nets the day before capturing, make sure the net is centered over the hole. It is best to mark the ground at the point where the end of the pole is set and where the base of the pole is set. Poles should be laid out so that the pole when lifted straight up will be over the hole. If this cannot be done, make sure to record where the pole is in relation to the hole so that the pole can be properly raised. If necessary, use a brush cutter to clear the area around the pole so that the pull-string will not get tangled and inadvertently cause the net to close. Be sure to retighten the blue locks on the extension poles the next morning prior to raising the pole. Sometimes the sections will fall when you raise the net and you will have to try and remeasure the distance to the cavity in the dark. This loud noise can also cause the bird to flush. If necessary, use duct tape to make sure the lock is secure. Make sure the drawstrings are attached before raising the pole and pull it gently closed once you are sure the bird is in the net. The pole should be raised by first placing your foot at the base of the pole to make sure it is secure. Use the same method when lowering the pole so that the base does not slip. It is best to twist the net around the pole as you lower it to ensure that the bird cannot escape. Be sure to lower the net gently to the ground. If the bird hangs in the top of the net and the net does not have a drawstring, try lowering the net by releasing each section and keeping the net against the tree. Tall trees present a difficult challenge. This may require an extra extension or the use of ladders. If this is the case, extreme care must be taken not to harm the bird. A spotter may be necessary in these situations. If ladders are used, get out to the site a little earlier to allow for time to set up. This

must be done in the dark to limit the possibility of flushing the bird. First climb up to the appropriate height on the ladder. This height should be predetermined the day before when setting up to capture. If possible, the person who set up on the tree should do the capture. Once at the proper height, a second person should raise the pole and hand it to the person on the ladder. Once the bird is captured, carefully lower the pole, using a spotter if necessary. Record all data on the banding section of the tablet computer. Never capture an adult if it is raining or if temperature is below 40 degrees F.

If a banded adult is re-captured, note band combinations and USFWS number and immediately release the bird. If bands are too sappy to read, take the bird back to the truck and scrape off sap or replace color bands as necessary. Questionable combinations can be looked up on the tablet computers. Searches can also be done on the band number.

One person can set up and capture off of multiple trees if a) poles do not have extensions, b) poles are within visual site of the bander, c) unmanned poles are strapped/bungeed to tree, d) bird(s) is (are) caught/banded/released and then bander sets up to catch another bird that has not flushed yet.

Unbanded birds may be captured beginning 2 weeks after the nest fledges or July 1 if the cluster has not nested. Clusters where the nest failed can be captured beginning July 1 if they have not renested. Adults can be captured through 31 March. No adults should be captured during the breeding season.

L. Translocation

As a general rule, only juvenile birds are translocated. The bird to translocate and any birds in the target cluster must be banded. The target cluster should be visited to confirm the need for the juvenile male (in the case of a single female) or a juvenile female (in the case of a single male). Pairs of juveniles may also be translocated to recruitment clusters. The target cluster must have a suitable roosting cavity for each translocated bird. This can be either a natural or artificial cavity. Each cavity should be checked the day prior to translocation to make sure it is empty and/or not being used by another RCW. The cavity is then screened so that no other animal can use it.

The bird to be translocated will be captured in the evening. See Section J for proper capture techniques. After capturing the bird, it is placed in a transport box and taken to the target cluster. The bird is placed into a cavity to roost overnight. The screen should be replaced to assure the bird remains in the cavity overnight. Return to the cluster the next morning and remove the screen when the other bird(s) flush. The cluster should be revisited again that evening to check for roosting. A morning or evening check should be made a week later and for several weeks thereafter to document roosting. If the bird is not seen, nearby clusters should be checked to see if the bird is roosting elsewhere.

When translocating pairs of birds to a new recruitment site, there should be one other site available for each pair translocated. These sites should meet all minimum requirements for a recruitment site and should have at least 4 clean cavities. These cavities can be screened until the birds are released, but screens

must be removed once the birds are released. This gives the birds other nearby opportunities for roosting.

If a non-target RCW is captured, it should be returned to the cavity from which it was caught. Place the bird in a transport box and climb the tree. The birds should be held in the cavity by placing a screen, hand or some other object over the entrance until the bird settles down. This should be a minimum of 15 minutes. Descend the tree as quietly as possible so as not to flush the bird.

Each translocation should be documented via a Memorandum For Record for end of the year reporting purposes.

Safety Guidelines

Trucks

Each truck should have:

1. A well stocked first aid kit
2. A fully charged fire extinguisher
3. A radio with at least 1 back up battery
4. Binoculars/Spotting Scope
5. An intact spare tire
6. Water
7. Fire fighting equipment-rakes, flaps, and water bag

Climbing Swedish ladders and banding birds

No one should:

1. Climb in the rain.
2. Climb when the belt will not fit around the tree while standing on the ground, unless an extension is added.
3. Climb alone.
4. Band nestlings unless trained by a certified instructor.
5. Band adults until having been supervised in banding 10 adults by a biologist or trained technician.
6. Capture adults if the capture nets are wet.
7. Capture adults if it is raining or the temperature is below 40 degrees F.
8. Capture adults if it is getting dark (causing the birds to roost outside).

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