

GOPHER TORTOISE PERMITTING GUIDELINES

Gopherus polyphemus

**April 2008
(Revised June 2010)**



**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
620 South Meridian Street
Tallahassee, Florida 32399-1600**

Insert: Permitting Guidelines Revisions History

September 2008

Authorized Gopher Tortoise Agent requirements were revised (pages 10 - 13).

March 12, 2009

Revisions to the following sections have been made: definition of “gopher tortoise habitat” added to the glossary; Table 1, Mitigation Contributions, clarified, options for payment revised to delay acceptance of letters of credit; Recipient Site Permits; Appendix 3; Appendix 4; 100% surveying (various sections); 10 or Fewer Burrows permits criteria addressed in new Appendix 11; clarification of permit duration criteria; revision to when proof of local government approval is required; Improved Methods for Baseline Vegetation Sampling and Follow-up Monitoring on Recipient Sites in Appendix 7; Revised Indigo Snake handling and relocation guidance consistent with the U.S. Fish & Wildlife Service.

April 14, 2009

Revisions to the following sections have been made: clarification on permitting phased projects in Permit Duration; clarification on when FWC can provide notice to the permittee to do an on-site inspection of a 100% survey prior capture activities, and what the procedure is if more burrows are discovered Burrow Surveys on Development Sites and in Appendix 4; clarification on when the 100-mile north/south relocation would be waived under Holding and Transport; clarification on permit duration for 5-year permits.

Upon approval of the revision to these guidelines, all guidelines will be implemented with the exception of Settlement permits. Guidelines in this document that address the issuance of Settlement permits (Permit for Authorized Relocation Post-Settlement of Law Enforcement Cases) are shaded because proposed revisions are still in draft form and full stakeholder input has not yet been solicited. Until the Settlement permit has been approved, the “after-the-fact” permit process continues to be in effect.

June 2010

Revisions to the following sections have been made: added clarification on impacts that occur within 25 feet of a burrow; added mitigation contributions for Temporary Exclusion permit; replaced “Settlement” permit with “Disturbed Site” permit; revised marking scheme; added “Authorized Agent” permit activity for “trainer;” included the option for the on-site relocation of tortoises whose burrows compromise existing structures; revised financial assurance requirements; added Appendix 13: “Criteria for Gopher Tortoise Recipient Sites to Qualify as Research Sites.”

TABLE OF CONTENTS

GLOSSARY	v
I. INTRODUCTION	1
II. DETERMINING IF A PERMIT IS REQUIRED	2
Rules and Policies Protecting Tortoises and Their Burrows	2
Activities That Do Not Require a Permit	2
Activities That Require a Permit	3
Site Preparation Activities for Development.....	3
III. PERMITTING GUIDELINES	5
Mitigation Contributions	5
Documentation for Permit Applications and Issuance	8
Permit Duration, Permit Posting, and Post-Relocation Reporting	9
Burrow Surveys on the Development Site	10
Capture, Handling, and Transport of Relocated Tortoises	11
IV. TYPES OF PERMITS	13
Authorized Gopher Tortoise Agent Permit	13
Relocation Permits for Properties with 10 or Fewer Burrows	17
Conservation Permit.....	18
Recipient Site Permits.....	19
Temporary Exclusion Permit for Major Linear Utility Corridors	24
Burrow or Structure Protection Permit	25
Emergency Take without Relocation Permit.....	26
Disturbed Site Permit	27
Due Process for Gopher Tortoise Permit Applicants	29
V. HANDLING OF COMMENSAL SPECIES DURING RELOCATIONS	29
APPENDICES	30
Appendix 1. Rules and Policies Protecting Gopher Tortoises and Their Burrows	30
Appendix 2. FWC Gopher Tortoise Permitting System Process Map	33
Appendix 3. Information Needed for Relocation Permit Applications and Recipient Site Permit Applications	35
Appendix 4. Methods for Burrow Surveys on Development (Donor) and Recipient Sites	40
Appendix 5. Marking and Measuring Gopher Tortoises during Relocations	47
Appendix 6. Health Considerations for Gopher Tortoises during Relocations	48
Appendix 7. Methods for Baseline Vegetation Sampling and Follow-up Monitoring on Recipient Sites	53
Appendix 8. Draft FWC Conservation Easement	56
Appendix 9. Handling of Commensal Species during Relocations	61
Appendix 10. FWC Gopher Tortoise Contact Information	66

Appendix 11. Modified Application Requirements, Recipient Site Criteria,
and Handling Procedures for the 10 or Fewer Burrows Permit and
the Burrow or Structure Protection Permit..... 67

Appendix 12. Gopher Tortoise Restocking Guidelines for Publicly 70
Owned Conservation Lands (*This section is under development*)

Appendix 13. Criteria for Gopher Tortoise Recipient Sites to Qualify as 71
Research Sites

LIST OF TABLES

Table 1. Permit Type and Corresponding Mitigation Contribution 8

Table 2. *Acceptable* and *Desirable* Criteria Thresholds for
Recipient Site Characteristics..... 24

GLOSSARY

abandoned burrow – burrow appears unused and dilapidated. The entrance is partially or completely collapsed, and the burrow is partially or completely filled with leaves or soil. Recent rains, or recent activity by livestock or humans, do not appear to be the primary reason for burrow collapse. There are no trails into the burrow that might indicate that a tortoise recently passed through the leaf litter or that a small tortoise is using a dilapidated, adult burrow.

active burrow – burrow is in good repair, has the classic half-moon shaped entrance, and appears to be in use by a tortoise. These burrows generally have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound. The burrow floor often contains loose soil caused by tortoise activity. The burrow mound is usually clear of vegetation, and it may contain recently excavated soil. For burrow surveys and tortoise density determination, active burrows are combined with inactive burrows to create the *potentially occupied* classification.

asters – plants in the sunflower family.

baseline density – the estimated density (tortoises per acre) of resident gopher tortoises on a recipient site before relocated tortoises are released.

belt transect – a long, thin plot of specific or variable length and width. Burrows are counted within each transect to provide an estimate of the number of burrows, and tortoises, on a given site.

bucket trap – a plastic bucket (generally five gallons or 19 liters, but may be larger or smaller depending on burrow size) that is sunk directly in front of a burrow opening and covered with paper or cloth and soil (for camouflage) to create a pitfall trap for a gopher tortoise. Bucket traps may capture tortoises leaving or entering a burrow.

caliper – a device used to measure straight-line distance between two points of an object or animal. In this case, a caliper with two long metal “jaws” is used to measure the length of the top (carapace) and bottom (plastron) shells of gopher tortoises; this caliper was designed to measure the diameter of trees and can be obtained from forestry supply companies.

canopy cover – layer of vegetation extending above head height, usually composed of tree branches.

carapace – the top (upper) shell of a tortoise.

carrying capacity – the maximum number of individuals of a species that an area can support, given the amount and quality of food, water, and cover.

clinical signs – veterinary term referring to visible signs or symptoms of disease, illness, or lack of well-being in animals. Nasal discharge is a clinical sign that may be observed when tortoises have upper respiratory tract disease (URTD).

commensal – living in a relationship in which one animal derives food, refuge, or other benefits from another animal without hurting or helping it. The gopher frog, eastern indigo snake, Florida pine snake, and Florida mouse are listed commensal species of the gopher tortoise.

compromised burrow – gopher tortoise burrow that compromises the integrity or utility of an existing structure (e.g., under a propane tank), or the safety of the resident gopher tortoise (e.g., burrows in a grass parking lot, dirt driveway, etc.).

conjunctiva – the mucous membrane that covers the exposed portion of the eyeball and the inner surface of the eye.

conservation easement – a voluntary legal agreement between a landowner and a land trust or government agency that limits the type or amount of development on the landowner's property, thus protecting the land's conservation value while retaining private ownership.

correction factor – also known as a burrow occupancy rate; the percentage of gopher tortoise burrows on a particular site that are occupied at a given time (tortoises generally use more than one burrow over time).

densitometer – a forestry device used to determine canopy cover for a given area.

depth to water table (DWT) – a soil suitability criterion referring to a saturated zone in the soil. Values provided in the Natural Resources Conservation Service (NRCS) website database are representative values (neither the highest nor lowest) for a particular soil type.

disturbed site (area)- a site where disturbance to the ground or vegetation has occurred.

donor site – the property, usually a development, from which tortoises are removed during relocations.

enclosure – a temporary, specified area of a recipient site that is surrounded by approved fencing or hay/pine straw bales to initially contain relocated tortoises and to help them acclimate to their new surroundings. See “soft release.”

endemic – exclusively native to a particular geographic area.

final stocking rate – the density of tortoises that can be relocated to a recipient site after considering the baseline density of the resident population. The final stocking rate is calculated by determining the maximum stocking rate (also known as the site evaluation stocking rate) and subtracting the baseline density.

filter fabric fencing – see “silt fencing.”

forage – plant material, such as grasses, legumes, and other flowering plants, eaten by grazing animals.

global positioning system (GPS) – a satellite-based navigational system; the receiver provides latitude and longitude data for specific applications (in this case, burrow locations).

gopher tortoise habitat – gopher tortoises use a variety of generally upland habitats including, but not restricted to, sandhill, scrub, xeric hammock, mixed hardwood-pine, pine flatwoods, dry prairies, coastal grasslands and dunes, and disturbed habitats (e.g., old fields, pastures).

ground cover – herbaceous plants and the lowest shrubs occupying an area: a generic term used to describe the mat of plants found on the forest floor.

herbaceous –nonwoody plants, generally green and leafy in appearance and texture.

impact - for the purposes of these Permitting Guidelines, unless otherwise noted as a “positive impact,” an impact includes any act or outcome as defined in Rule 68A-27.004 F.A.C., that may adversely affect any gopher tortoise or gopher tortoise burrow.

inactive burrow – burrow is in good repair, but does not show recent tortoise use. The lack of tortoise activity may be due to weather or season. These burrows have the classic half-moon shaped entrance, but the soil on the burrow floor is usually hard-packed, as is the burrow mound. There are no tortoise tracks or recently excavated soil, either on the burrow floor or on the mound. The burrow mound may have vegetation growing on it or be partially covered with fallen leaves. For burrow surveys and tortoise density determination, inactive burrows are combined with active burrows to create the *potentially occupied* classification.

infrastructure – structural elements that provide the framework supporting a development (e.g., roads, bridges, water resources, wastewater management, electric power transmission, and telecommunications).

legumes – plants in the bean family.

live trap – a mesh wire cage trap, either homemade or commercially available (e.g., Havahart) that is set directly in front of a burrow to capture the resident tortoise.

local government approval – a permit, agreement, development order, or other authorization issued or granted in writing by the local city or county government having jurisdiction over the property.

long-term protection (habitat) – either privately or publicly owned lands placed under a perpetual (i.e., endless duration) conservation easement.

mesic (habitat) – having a moderate or well-balanced supply of moisture.

midstory – the middle layer, generally 3-9 feet in height, of trees and shrubs (in a multi-layered forest) shaded by taller trees.

mitigation contribution – compensation, usually either in the form of monetary contributions or protected habitat donations, to offset the ill effects of human-related land change (e.g., development) on gopher tortoise populations.

mycoplasma – an infectious agent (bacterium) that has been associated with upper respiratory tract disease in gopher tortoises.

nares – external openings of the nostrils.

off-site recipient area – an area that does not lie within the same boundaries (as defined in the legal description or as identified by the county parcel identification number) of the development area from which tortoises are to be removed and that may be under either the same or different ownership.

on-site recipient area – an area that is located within the same boundaries (as defined in the legal description or as identified by the county parcel identification number) of the development area from which tortoises are to be removed and that is under the same ownership as the development area.

PIT tags – passive integrated transponder (PIT) tags are small microchips (about the size of a grain of rice) that are injected into a tortoise's hind leg using a hand-held applicator. A hand-held scanner reads the tag's electromagnetic code and displays the tag's number. PIT tags provide an alternative method for permanently and uniquely marking individual tortoises.

plastron – the bottom (lower) shell of a tortoise.

plat – a map of land made by a surveyor showing boundary lines, buildings, and other improvements on the land.

population – a group of individuals of the same species that occur in a defined area at the same time and regularly interact or interbreed.

potential tortoise habitat – those land cover types and soil associations that are known to support the life history requirements of the gopher tortoise. These habitats include, but are not limited to, sandhill, scrub, scrubby flatwoods, pine flatwoods, dry prairie, coastal strand, xeric hammock, mixed pine-hardwoods, and disturbed habitats on suitably drained soils.

potentially occupied burrow – this classification combines the active and inactive categories and, therefore, includes burrows with obvious signs of use and those with minimal or no

obvious sign of use. A potentially occupied burrow is in good repair and has the classic half-moon shaped entrance. These burrows may have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound, or may have subtle or no tortoise sign. The lack of observable tortoise signs may be due to weather or season. The burrow floor may contain loose soil caused by tortoise activity, or it may be hard packed. The burrow mound may or may not have vegetation growing on it, and it may be partially covered by fallen leaves.

prescribed fire – a planned fire applied within a particular land area under the right weather conditions to accomplish specific, well-defined management objectives.

public conservation lands – publicly owned lands that are currently managed for conservation and are designated as conservation lands by Chapter 253.034, Florida Statutes, purchased for conservation purposes using funds from bonds or other monies dedicated specifically for conservation lands acquisition (e.g., Florida Forever, Preservation 2000, local bond initiatives, etc.), or afforded protection under federal law.

recipient site – the property where relocated tortoises are released.

recommendation – preferred protocol or technique that permit applicants or permittees should follow, but that is not required (i.e., other viable methods are allowed). In the context of these guidelines, a recommendation is generally indicated by use of the verbs “should” or “may.”

relocation – deliberately moving wild gopher tortoises.

requirement – action or protocol that must be followed before FWC will issue a permit. A requirement also includes actions that must be undertaken to avoid violating FWC permit conditions and rules. In the text of these guidelines, a requirement is generally indicated by use of the verbs “must” or “shall,” or if an action is prohibited, by use of “do not.”

rescue relocation – deliberately moving individuals or groups of tortoises to areas that are typically unprotected and may be relatively small, disturbed, or inadequately managed to support long-term population viability. Rescue relocation is conducted primarily to remove wild gopher tortoises from human-caused harm.

responsible relocation – deliberately moving wild gopher tortoises into protected, managed, suitable habitat where their future survival and population viability are very likely. Restocking to such sites where tortoise populations have been severely depleted is a form of responsible relocation; however, tortoises may also be responsibly relocated to sites with resident tortoises where the carrying capacity has been increased through habitat management to provide sufficient forage for additional tortoises.

restocking – deliberately moving wild gopher tortoises into protected, managed, suitable habitat where resident densities are extremely low and where the tortoises’ future survival and long-term population viability are very likely.

restocking site – an area of protected, managed, suitable habitat where gopher tortoise populations have been severely depleted or eliminated.

roller chopping – a forestry method for preparing sites for planting pine trees; also used as a land management tool to reduce the height and density of understory vegetation. A bulldozer pulls a heavy cylindrical drum with cutting blades that chop vegetation.

scute – a bony external plate or scale, as on the shell of a tortoise.

seropositive – positive blood test indicating an immune response (exposure) to the bacteria that cause upper respiratory tract disease in gopher tortoises.

shaded – reducing or eliminating sunlight and excessive heat when using bucket traps or live traps or when transporting tortoises. Shade may be provided by man-made materials (e.g., plywood, plastic, cloth) or by vegetation (noting that vegetation dries with time and may fail to provide proper shade for more than a few days).

short-term protection (habitat) – either privately or publicly owned lands that have some enforceable protection commitment, but those commitments do not meet the definition of “long-term protection” or “public conservation lands.”

shrub – a woody or herbaceous plant smaller in height than a tree and approximately 3 to 6 feet above the ground, often formed by a number of vertical or semi-upright branches or stems arising close to the ground.

silt fencing (Belton Industries, #935) – a durable type of silt fencing (36 in x 75 ft; pre-assembled, double-stapled, with oak stakes) that has been field-tested as an enclosure material for gopher tortoises. The manufacturer is Belton Industries, PO Box 127, Belton, SC; 800-845-8743; www.beltonindustries.com/silt.html. Distributors include Pallen Enterprises, Conyers, GA (770-922-1812) and Certified Slings, Ft. Myers, FL (239-334-1343).

silt fencing (filter fabric) – temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. There are two types: 1) the silt fence is a temporary linear filter barrier constructed of synthetic filter fabric, posts, and, depending upon the strength of the fabric used, wire fence for support; 2) the filter barrier is constructed of stakes and burlap or synthetic filter fabric. These types of silt fencing are useful for temporary exclusion, but are generally not durable enough for six month-enclosures on recipient sites.

silviculture – the art and science of establishing and growing healthy, high-quality forests to meet human needs.

site evaluation stocking rate (maximum stocking rate) – the maximum allowable density on a particular recipient site, determined by evaluating habitat conditions such as canopy

cover, soils, etc. Generally, maximum stocking rates range from two to four tortoises per acre.

site fidelity – remaining within a particular area.

soft release (relocation) – those releases where relocated animals are contained in a temporary enclosure at the recipient site for some period of time before being allowed to roam freely; this differs from hard releases where animals are turned loose without any period to acclimate to their new surroundings.

Strategic Habitat Conservation Area – an area not within existing publicly owned conservation lands that FWC has identified as needing protection to meet minimum conservation goals and provide greater security for rare native plants, animals, and habitats.

take – taking, attempting to take, pursuing, hunting, molesting, capturing, or killing any wildlife or freshwater fish, or their nests or eggs, by any means, whether or not such actions result in obtaining possession of such wildlife or freshwater fish or their nests or eggs.

understory – the lowest vegetative layer in a forest, consisting of woody and herbaceous growth less than 3 feet in height.

unprotected site (relocation) – lands that do not have any enforceable protection commitments or use restrictions that would prevent them from being modified and made unsuitable for tortoises.

upland (habitat) – high, generally dry lands that are not wetlands (water).

upper respiratory tract disease (URTD) – a disease that occurs in gopher tortoises, where infected individuals may show a discharge from the nasal passages or eyes, swelling of the eyelids or area around the eyes, or reddened third eyelid. These so-called clinical signs (i.e., symptoms) come and go over time.

viable population – a stable, self-sustaining population with a high likelihood (e.g., more than 95%) of surviving for a long-term period (e.g., 100 years).

xeric (habitat) – very dry, in this case due to soil factors.

I. INTRODUCTION

The following gopher tortoise (*Gopherus polyphemus*) permitting guidelines have been produced by the Florida Fish and Wildlife Conservation Commission (FWC), with input from stakeholders, to provide a comprehensive overview of FWC's gopher tortoise permitting system. The new gopher tortoise permitting system has been developed as one tool in accomplishing the goals and objectives set forth in FWC's *Gopher Tortoise Management Plan*, approved in September 2007.

The overall goal of the management plan is to restore and maintain secure, viable populations of gopher tortoises throughout the species' current range in Florida. Objectives under this goal include the following: 1) improving gopher tortoise carrying capacity on lands with existing or potential gopher tortoise habitat; 2) increasing the amount of protected gopher tortoise habitat; 3) restocking gopher tortoises to protected and managed areas; and 4) decreasing gopher tortoise mortality on lands proposed for development.

This permit system has been designed to help accomplish all four of these objectives by providing incentives to landowners to manage their habitat for gopher tortoises, tortoise commensals, and other native wildlife species; providing incentives to responsibly relocate and restock tortoises to protected, managed lands rather than unprotected sites; providing a new permitting system that does not allow entombment of tortoises; and providing a permitting system with regulation and enforcement sufficient to ensure compliance with FWC guidelines and rules.

The *Gopher Tortoise Permitting Guidelines* is a document that may be edited and updated as needed in the future. Proposed changes to these guidelines will be reviewed annually by an FWC standing team and a public stakeholder advisory group. All changes will require approval from the FWC Executive Director. The FWC Executive Director will also coordinate with the FWC Chairman to determine when changes to these guidelines are substantive and warrant full review by the FWC Commissioners.

These guidelines do not address technical details or aspects of the permit application process associated with the gopher tortoise permitting website. The online permitting system allows individuals to register and submit permit applications, electronically submit required mitigation, and receive official communications including permits from FWC. It also allows the public to search for and view permit applications and issued permits. Additional information, instructions and frequently asked questions on the online permitting system is available at MyFWC.com/GopherTortoise.

These guidelines include specific requirements and recommendations for various elements of the gopher tortoise permitting system. *Requirements* include actions or protocols that must be followed before FWC will issue a permit. They also include actions that must be undertaken to avoid violating FWC permit conditions and rules. The terms "shall" or "must" in this document denote guideline requirements. *Recommendations* include preferred protocols or techniques that applicants or permittees should follow, but that are not required (i.e., other viable methods are allowed). The terms "should" and "may" in this document denote guideline recommendations.

These guidelines are intended to be a single source for all policy and protocols associated with FWC's gopher tortoise permitting system. As such, they are written primarily for an audience seeking such in-depth knowledge. Other publications and online materials have been developed to address the informational needs of groups that do not require an in-depth understanding of the entire system.

II. DETERMINING IF A PERMIT IS REQUIRED

Rules and Policies Protecting Tortoises and Their Burrows

Rules protecting gopher tortoises and their burrows, and the Gopher Tortoise Enforcement Policy, are found in Appendix 1.

Activities That Do Not Require a Permit

Agricultural, silvicultural, and wildlife management activities that impact gopher tortoises or gopher tortoise burrows do not require a permit if they are conducted in accordance with the Gopher Tortoise Enforcement Policy (Appendix 1), which is a part of these guidelines. These activities include tilling, planting, harvesting, prescribed burning, mowing, disking, roller chopping, and tree cutting. For additional guidance on activities that do not require a permit, refer to the *Gopher Tortoise Enforcement Policy* in Appendix 1.

Linear utility and highway right-of-way vegetation maintenance activities that may impact gopher tortoises or gopher tortoise burrows do not require a permit. These activities include mowing and tree cutting.

Routine yard and vegetation maintenance and landscaping activities that do not harm gopher tortoises or collapse tortoise burrows do not require a permit.

Note: Agricultural, silvicultural, wildlife management, and linear utility and highway right-of-way vegetation maintenance activities have not been shown to routinely result in significant gopher tortoise deaths (i.e., beyond the infrequent, accidental death of individual tortoises). Therefore, FWC will investigate reports of the death of significant numbers of tortoises to determine if these deaths resulted from activities that did not constitute bona fide agricultural, silvicultural, wildlife management, or linear utility and highway right-of-way vegetation maintenance activities. The FWC may pursue such activities as a violation of Rule 68A-27.004, Florida Administrative Code (F.A.C.), which is included in Appendix 1.

Note: Activities that are intended to prepare land for development are not considered bona fide agricultural, silvicultural, and wildlife management, linear utility, or highway right-of-way vegetation maintenance activities. A permit is required for land development activities (including site preparation for such activities) that result in impacts to gopher tortoises or their burrows. See Site Preparation Activities for Development below.

A FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them. Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed “islands” or “crop circles”) and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed. Examples of other violations noted in the past by FWC include but are not limited to killing or injuring a tortoise, harassing a tortoise by blocking access to its burrow, and altering gopher tortoise habitat to such an extent that resident tortoises are taken (see Glossary and Site Preparation Activities for Development, below).

Activities That Require a Permit

A permit is required for any activity not covered in the section above, that causes a take, harassment, molestation, damage, or destruction to gopher tortoises or their burrows (see Rule 68A-27.004, F.A.C., in Appendix 1.) Activities that can lead to rule violations include, but are not limited to, clearing, grading, paving, bulldozing, digging, building construction, and site preparation for development.

Examples of actions that are rule violations include the following:

- 1) killing or causing direct harm to gopher tortoises
- 2) collapsing gopher tortoise burrow entrances or other parts of tortoise burrows without a permit
- 3) blocking, covering, or filling in gopher tortoise burrow entrances without a permit
- 4) placing harmful substances or devices inside gopher tortoise burrows
- 5) penning or restricting gopher tortoises into small areas for more than 72 hours without a permit
- 6) altering gopher tortoise habitat to such an extent that resident tortoises are taken (see Glossary) by such activities
- 7) excluding tortoises from their burrows without a permit
- 8) relocating or possessing tortoises without a permit

Site Preparation Activities for Development

A permit is required for any site preparation activity conducted as a precursor to development that disturbs vegetation or the ground which impacts gopher tortoises or their burrows at the time of or as a result of development. To conduct these activities without a permit is a violation of Rule 68A-27.004, F.A.C. (see examples 1-8, above).

Site preparation activities such as hand trimming vegetation and other minor determinations of suitability of property for development do not require a permit. These low-impact activities are allowed without a permit if they do not harm gopher tortoise burrows, harm gopher tortoises, or disturb the ground or vegetation so that accurate tortoise burrow surveys or FWC site checks cannot be conducted. FWC law enforcement will respond to reports of take, harassment,

molestation, damage, or destruction of gopher tortoises or their burrows and investigate any potential criminal violations.

On sites where tortoises are present and burrows (active or inactive) are present, most site preparation activities require a permit. These activities include building construction, bulldozing, paving, clearing, or grading. If work has started without the proper permit, work shall stop on-site until a relocation permit has been obtained and all gopher tortoises have been relocated. If work has begun before a relocation permit is issued or before gopher tortoise relocation is complete, all prior permits may be voided and a Disturbed Site permit may be required.

Permit applications must include tortoise surveys of the entire development, not just infrastructure components. Permits will not be issued solely for proposed infrastructure (e.g., roads and utilities) that are part of a larger common development plan, project, plat, or subdivision. Issued permits must address all burrows to be impacted on the entire project, development, plat, or subdivision site plan (the development footprint). For example, if the entire development footprint impacts more than 10 burrows, such sites will not be eligible (i.e., meet the criteria) for issuance of a 10 or Fewer Burrows permit, even if the infrastructure itself impacts 10 or fewer burrows.

Applicants submitting permit applications for projects with site plans that include lots or space for residential, industrial, institutional, commercial, or other development must consider all burrows within such areas to be impacted by the development footprint. Only those tortoises residing in burrows that are located within either designated preserves or other areas that will not be impacted by any activity associated with the ultimate build-out of the proposed development site do not have to be relocated. Large projects that are subdivided into development phases where each phase is approved by the local government under a separate development order may be permitted separately, but only one 10 or Fewer Burrows permit will be issued per multi-phased project.

If site preparation activities occur before a gopher tortoise relocation permit is issued, then a Disturbed Site permit may be required. The Disturbed Site permit process may result in the denial of an existing permit application or revocation of an issued gopher tortoise relocation permit (see Section IV).

In disturbed site cases, an FWC law enforcement investigation will be conducted to determine if gopher tortoises or gopher tortoise burrows have been impacted. Regardless of the outcome of investigations, the permit application review process will not resume until any gopher tortoises potentially buried in disturbed portions of the project site are given adequate time to dig out (a minimum of 28 days, comparable to that required during tortoise trapping efforts; however, longer periods may be warranted during cold weather when tortoise movement is typically slower).

III. PERMITTING GUIDELINES

The FWC uses a multi-tiered approach to permitting actions involving gopher tortoises. These permits are divided into three main types: 1) Authorized Agent permits, which authorize persons to trap, transport, and release tortoises; 2) Site-specific relocation permits, which authorize trapping and relocation of tortoises either within the boundaries of the area being impacted (on-site) or from the area being impacted to a permitted recipient site (off-site); and 3) Recipient Site permits, which authorize the use of designated sites meeting specific criteria as recipient areas for tortoises. Emergency Take permits, Disturbed Site permits, and Burrow or Structure Protection permits are three additional permit types, only issued under unusual circumstances. The types of permits are illustrated by the flow chart in Appendix 2, FWC Gopher Tortoise Permitting System Process Map.

Entombment of tortoises is not allowed under the conditions of any permit, with the exception of Emergency Take permits. Emergency Take permits are available only in extreme circumstances where there is an immediate danger to public health and safety or in direct response to an official declaration of emergency by the Governor or local government authority. Local emergency situations that do not rise to the level of an official declaration should be handled by coordinating with FWC's Division of Law Enforcement and seeking assistance in determining steps that must be taken in order to avoid additional take or endangerment of gopher tortoises.

Mitigation Contributions

A mitigation contribution is required for all relocation permits. A flat mitigation contribution from each applicant applies to the first 10 burrows (up to 5 tortoises for conservation permits) impacted on each project site. Additional mitigation for sites supporting more than 10 tortoise burrows is required. Mitigation contributions are assessed by determining the estimated number of tortoises impacted (the number of potentially occupied tortoise burrows to be impacted, divided by 2). A variable scale for additional contributions is based on the overall conservation value of the action being permitted and the estimated number of gopher tortoises being impacted by the project. Preferred conservation actions, such as responsibly relocating tortoises to long-term protected lands, require a lower contribution per tortoise than relocations to short-term protected or unprotected lands or relocations associated with Disturbed Site permits. All mitigation contributions support gopher tortoise conservation actions as specified in the FWC-approved Gopher Tortoise Management Plan.

Other costs may be incurred by applicants obtaining permits or conducting activities related to gopher tortoises. Examples of such costs include fees paid to consultants, fees paid for on-site preparation for gopher tortoise related activities, fees paid to owners of recipient areas, and fees associated with establishing conservation easements. These fees are not paid to FWC nor controlled by FWC.

All mitigation contributions must be submitted to FWC as specified in these guidelines. Gopher tortoise mitigation contributions for a 10 or Fewer Burrows permit, Authorized Agent permit, Recipient Site permit, Temporary Exclusion permit, Burrow or Structure Protection permit, or Disturbed Site permit must be submitted to FWC before the final permit will be issued.

Mitigation contributions for Conservation permits representing 100% of the estimated total amount due will be submitted prior to issuance of the permit. FWC will continue to explore alternative methods of payment, such as letters of credit and performance bonds, in the future.

If the actual number of gopher tortoises relocated is less than the number estimated, a refund of any excess funds paid will be made to the permittee. Permittees seeking a refund must submit a refund request form to FWC within 60 days of the date that the final after action report is approved. Disturbed Site permits follow a different refund process (see Section IV). If an issued gopher tortoise relocation permit is used to attempt to capture a gopher tortoise(s) but no gopher tortoise is captured, the minimum mitigation amount required to obtain that type of relocation permit (e.g., \$200 for 10 or Fewer Burrows permits or Conservation permits, or \$100 for Temporary Exclusion permits with tortoises excluded for two months or less) will not be refunded to the permittee because the issued permit authorized both the capture of gopher tortoises, and the damage, collapse or covering of gopher tortoise burrow(s).

If the number of tortoises encountered during relocation exceeds the number permitted, then the permittee or agent must stop all attempts to capture any gopher tortoise in excess of the permitted number, and call the FWC Gopher Tortoise Permit Coordinator as soon as possible. The permittee or agent must submit an application to amend the relocation permit, submit the associated mitigation contribution for additional tortoises, and be in possession of the issued amended permit before attempting to capture or relocate any gopher tortoise in excess of the original number permitted.

Juvenile tortoises that are less than 130 mm [5 inches] carapace length must be included on the burrow surveys and permitted for relocation. However, refunds will be provided by the FWC for relocated juvenile tortoises that are less than 130 mm carapace length after the final after action report is submitted and approved, and a refund request form is submitted by the permittee or his/her agent. Gopher tortoise eggs and nests are not included when calculating the mitigation contribution. All eggs and juvenile tortoises must be relocated.

Emergency Take permit mitigation contributions will be handled on a case-by-case basis, in accordance with the facts and circumstances of each permit incident. In cases where the number of burrows impacted can be accurately determined because of pre-existing on-site surveys, mitigation contributions will be calculated by multiplying this number by 0.5. This adjusted number will be used to calculate mitigation contributions as prescribed in Table 1. In cases where the total number of burrows impacted cannot be accurately estimated from prior surveys, mitigation contributions will be based on actual documented burrow evidence. Such evidence may include, but is not limited to, exit holes from old burrows, partial remains of burrows, and the density of gopher tortoise burrows (per acre) that occur within surrounding areas that contain similar vegetation and soil characteristics.

When an Emergency Take permit includes requirements for trapping or excavating burrows within an area that has been disturbed by clearing, grading, disking or other ground disturbance activities, no refunds will be made if the actual number of tortoises relocated is less than the number estimated, since gopher tortoises may have left the area during the disturbance.

The FWC realizes that all sites are unique and that circumstances influencing gopher tortoise populations are dynamic. For that reason, the initial permitting mitigation contribution is based on estimates from site surveys and a general application of a statewide correction factor. Estimating the total amount due is accomplished by calculating the number of potentially occupied burrows (based on surveys of not less than 15% of the project site areas where potential gopher tortoise habitat is found), dividing by 2, and then applying the mitigation contribution amounts shown for the various permit types described in Table 1.

The mitigation contribution amounts will be adjusted over time to keep pace with inflation. Tying these changes to the Consumer Price Index will ensure mitigation contributions are adjusted relative to actual price increases or decreases. The FWC will use the “All Urban Consumers Price Index” (CPI-U), which is a reflection of the highest percentage of the population, and the CPI-U for the Southeast region. Information on the Consumer Price Index is available online at www.bls.gov/cpi.

In subsequent years, mitigation contributions will change by an amount equal to the annual CPI-U for the Southeast region, and will be based on changes during the CPU calendar year (January 1–December 31). However, the minimum threshold for mitigation is set at the contribution levels outlined in the original approved version of the Gopher Tortoise Permitting Guidelines (April 2008). Adjustments to the contribution amount will take effect on March 1 of each year because the CPI for the previous year is usually not available until mid-February. The contribution will be calculated based on the date that a completed application is received by FWC. Mitigation contribution amounts will be published at MyFWC.com/GopherTortoise and sent out to all permittees.

Table 1. Permit Type and Corresponding Mitigation Contribution

PERMIT TYPE	MITIGATION CONTRIBUTION
Authorized Agent	\$500 (one-time contribution)
Recipient Site	\$500 per site (one-time contribution)
10 or Fewer Burrows <i>Tortoises are relocated on-site or off-site*</i>	\$200
Conservation >10 burrows relocated to long-term protected area	\$200 for first group of 10 burrows (up to five gopher tortoises) \$300 each additional tortoise
Conservation >10 burrows relocated to short-term protected area	\$200 for first group of 10 burrows (up to five gopher tortoises) \$3,000 each additional tortoise
Conservation <i>Tortoises relocated to unprotected area</i>	\$3,000 per tortoise
Temporary Exclusion <i>Exclusions for longer than 6 months must apply for a Conservation permit</i>	\$100 per tortoise (exclusions <2 months) \$200 per tortoise (exclusions 2 to 4 months) \$300 per tortoise (exclusions 4 to 6 months)
Burrow or Structure Protection <i>On-site relocation only</i>	\$25 for up to 2 burrows
Emergency Take	\$4,000 per tortoise
Disturbed Site	\$500 per tortoise for first group of 10 burrows (up to five gopher tortoises) \$4,000 each additional tortoise

*Gopher tortoises relocated off-site under a 10 or Fewer Burrows permit cannot be relocated to an unprotected recipient site.

Documentation for Permit Applications and Issuance

In accordance with the requirements of Rules 68A-25.002 and 68A-27.004 (F.A.C.), a permit for a gopher tortoise capture/relocation/release activity must be secured from FWC before initiating any relocation work. Required information for applications is outlined in Appendix 3, Informational Needs for Relocation Permit Applications and Recipient Site Permit Applications. Checklists are provided at MyFWC.com/GopherTortoise to assist applicants with the required information for each permit type.

As of April 2009, most permits can be applied for online at MyFWC.com/GopherTortoise. The online permitting system allows individuals to register, submit permit applications, electronically

submit required mitigation, and receive official communications including permits from FWC. Paper applications are also available, but applicants are encouraged to apply online to expedite the review process. Additional information, instructions and frequently asked questions regarding the online permitting system are available online at MyFWC.com/GopherTortoise.

Paper applications are available online at MyFWC.com/GopherTortoise or from the Gopher Tortoise Permit Coordinator, Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Mail Station 2A, Tallahassee, FL 32399-1600; (850)410-0656, ext. 17327; (850)488-5297 fax. For those opting to submit paper applications, the complete application should be submitted to the Gopher Tortoise Permit Coordinator at the above address at least 90 days prior to the time needed, although most applications will be processed in 45 days or less. Timely issuance of permits is dependent on receipt of required documentation.

Demonstration of need for a permit will require submittal of a development plan or proof of local government approval for the activity proposed (in the form of preliminary or final subdivision plat, or master planned unit development approval; Development of Regional Impact [DRI] development order; or authorization to commence clearing, grading, or construction activities). The actual capture and relocation authorized by the permit shall be conditioned upon the permittee submitting proof of local government approvals for clearing, grading or construction activities (if required at the local government level) to the FWC prior to commencing capture and relocation activities. Local governments may have requirements that an applicant demonstrate that FWC permits have been issued, or even that FWC permit requirements have been met, before issuing their final local government approval. The FWC will provide letters of intent or special conditions to permits, if necessary, that can be used to demonstrate agency concurrence with a proposed project. However, permits are not issued to move tortoises off a property where no construction activity is planned.

Permit Duration, Permit Posting, and Post-Relocation Reporting

The duration of each type of permit will be indicated on the permit. Authorized Agent permits are valid for a two-year period and may be renewed without additional payment in two-year increments. Recipient Site permits with long-term protection do not expire, but will be subject to reporting requirements within the special conditions. Permits for short-term protected recipient sites and unprotected recipient sites may be renewed every two years, but will require no additional mitigation contribution. Relocation permits for 10 or Fewer Burrows and Burrow or Structure Protection Permits will be valid for six months from the date of issuance and may be amended by the permittee to extend the permit duration for up to 6 months if relocation activities have not been completed. Conservation and Temporary Exclusion permits will be valid for either 12 months or 60 months and may be amended by the permittee to extend the permit duration for up to 12 months if relocation activities have not been completed. Emergency Take permits and Disturbed Site permits will be handled on a case-by-case basis, considering the circumstances of the development and the conditions present. Any request for permit renewal or amendments shall be submitted at least 45 days prior to the expiration date of the existing permit. Permit amendments are issued based on the permitting guidelines and specific permit conditions in effect at the time the complete application for a permit amendment is received by the FWC.

Phased projects, those projects with development phases based on geographic areas, may be permitted in one permit or in phases. Permits issued for individual phases will have conditions that specify the gopher tortoise conservation activities that must be conducted for those specifically permitted stages or phases of development. Refer to Appendix 3 for information needed for permit applications.

Either the original permit or a complete copy must be clearly posted at the affected site at all times while engaged in the permitted gopher tortoise relocation activities.

Within 30 days of release of the relocated tortoises, the permittee, or authorized agent if applicable, shall submit a report detailing the capture/relocation actions to FWC's Gopher Tortoise Permit Coordinator via FWC's permitting portal at MyFWC.com/GopherTortoise.

Burrow Surveys on the Development Site

A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development activities (including staging areas for heavy equipment) is required in order to apply for a relocation permit. These 15% surveys must be conducted no more than 90 days before an application is submitted to FWC. Burrow survey methods are outlined in Appendix 4, Methods for Burrow Surveys on Development (Donor) and Recipient Sites. Additional survey requirements for Disturbed Site permit applications are also listed in Appendix 4.

No more than 90 days prior to, and *no fewer* than 72 hours before (excluding weekends and holidays) commencing gopher tortoise capture and relocation activities, the authorized agent shall: 1) complete the 100% gopher tortoise survey of the donor site and burrow location map; and 2) deliver to the FWC the 100% survey and burrow location map. If FWC determines that an on-site survey inspection is necessary prior to commencing capture activities, FWC will provide notification to the permittee or authorized agent within 48 hours (excluding weekends and holidays) of receipt of the 100% survey and burrow location map.

All surveys completed by authorized agents are subject to field verification by FWC. If FWC determines from the on-site survey inspection that the number of gopher tortoise burrows on site causes the total to exceed the number authorized for capture and relocation under the existing gopher tortoise permit, the permittee must apply for an amendment and obtain a permit for the additional burrows from FWC before initiating any capture and relocation activities for the additional burrows.

Site preparation for development (such as land clearing) may commence on the project site, or for phases of the project site, for which gopher tortoise capture and relocation activities have been completed (see Section II for details.)

Capture, Handling, and Transport of Relocated Tortoises

Capture Methods: Tortoises must not be trapped, captured, or transported off project (donor) sites until local authorization for clearing, grading, or construction has been issued. Tortoises may be captured via bucket traps, live traps, hand capture outside burrows, and excavation by hand or backhoe. To prevent impalement of tortoises during backhoe excavation, the backhoe bucket must have a flat plate rather than teeth (long prongs). Use of a pulling rod with a blunted tip to prevent injury to a tortoise will be allowed on a case-by-case basis and will be specifically authorized on the permit. To qualify, experienced authorized agents must demonstrate to the FWC that they can capture tortoises in a safe manner.

If bucket or live traps are used, the traps must be shaded, they must be checked at least once per day (preferably twice per day—once in the morning and once in the late afternoon), and they must remain in place for at least 28 consecutive days or until the resident tortoise is captured, whichever occurs first. Drainage holes must be drilled into the bottom and lower sides of bucket traps and must be sufficient in size and number to prevent rainwater from accumulating in the bucket. Bucket traps are not effective in capturing tortoises during cold weather, particularly in northern Florida (north of State Road 50), because tortoises may remain inactive for extended periods of time. Therefore, bucket traps are not recommended from November through March in northern Florida. In cases where traps are set and no tortoise is captured, burrows must be excavated to determine if they are occupied. If the 28-day trapping period has passed without a capture and property boundary constraints make excavation impossible, FWC should be contacted to discuss alternatives.

Burrow scoping is not an acceptable method of confirming vacancy or determining occupancy rates because not all potentially occupied burrows can be successfully scoped due to curves or obstructions. However, burrow scopes may be used to enhance capture success for tortoises and their commensals. Capturing a tortoise outside a burrow is not sufficient reason to assume the burrow is vacant. Although all burrows on the donor site must be flagged or otherwise marked, only potentially occupied burrows must be trapped or excavated (see Appendix 4).

All relocated tortoises must be individually marked, measured, and weighed (see exceptions in Appendix 11). Techniques for measuring shells and for uniquely marking individual tortoises (i.e., assigning them a permanent identification number) are provided in Appendix 5.

If gopher tortoise eggs are encountered, the following procedure should be followed:

- 1) place sand from around the eggs into a container;
- 2) remove soil from around the eggs carefully (eggs are fragile, please handle with care);
- 3) use a pencil to place a small “x” on top of each egg;
- 4) make an egg-sized depression with your finger in the sand in the container;
- 5) place each egg in a depression with “x” facing up;
- 6) make note of approximate depth of nest in original burrow location, and;
- 7) at the recipient site, locate an existing burrow apron or other sandy area in an open, sunlit area and excavate to the approximate depth of original nest, place eggs “x” up in

the new nest in approximately the same orientation as they were originally located, and mark the new nest with a ring of fencing or flagging.

Any injury or fatality associated with the capture or relocation of gopher tortoises must be reported to the FWC Gopher Tortoise Permit Coordinator within two days.

Cold and hot weather handling: During the colder months, tortoises shall only be relocated when the low temperature at the recipient site is forecasted by the National Weather Service (www.nws.noaa.gov) to be above 50° Fahrenheit for three consecutive days after release (including the day of relocation). This three-day window of milder overnight temperatures is required to allow the relocated tortoises to settle into the recipient site and to reduce the chance of cold-related stress or mortality.

Because most tortoise relocations occur during the warmer months, overheating is a more common concern. During summer months, releases should not be made during the hottest part of the day at sites where shade is limited. Heat stress on gopher tortoises being captured and transported for relocation can be reduced or eliminated by assuring that tortoises are continually in shaded conditions.

Holding and Transport: Gopher tortoises must be held in shaded conditions and in individual containers that are large enough to allow the tortoise to turn around. To help prevent dehydration, especially during times of drought, tortoises should be soaked for 20-30 minutes in just enough water to cover the container bottom and to allow the tortoise to easily drink. Moist soil may be used to cover the bottom of the bin. It is appropriate to use soil from the burrow depths during backhoe excavation. Hay, straw, or shredded paper are other acceptable materials to place in the bin.

Gopher tortoises must not be held more than 72 hours after capture—and preferably not more than 24 hours. Tortoises should be transported within covered, well-ventilated areas of vehicles (not in open trucks) and should be kept at moderate temperatures (i.e., 70-85° Fahrenheit).

Recipient areas may be situated any distance east or west of the donor site, but no more than 100 miles north or south of the donor site unless no such recipient site is available. Some recipient sites conducting research can accept tortoises from any location in the state and may be exempt from the 100-mile limit.

Relocated gopher tortoises should be released on the recipient site near existing abandoned burrows or excavated starter burrows. Starter burrows should be excavated to approximately two feet in length at an approximate 45° angle to the ground.

Health Considerations (including testing for mycoplasmal upper respiratory tract disease [URTD] and accommodation of symptomatic/seropositive tortoises): Most health variables are poorly known for wild gopher tortoises, and even veterinarians with advanced training in animal health can have difficulty detecting subtle clues that a tortoise is ill. Authorized agents may refer to Appendix 6 for detailed outlines of cursory health evaluations, clinical signs and symptoms, and a simple disinfection protocol to help prevent spread of pathogens. Although detailed health

exams are not required, authorized agents should observe each tortoise for obvious clinical signs such as nasal discharge. Hands and equipment should be disinfected between handling tortoises within a donor site, but all equipment, particularly bins and bucket traps, must be disinfected between uses on different donor sites. Blood tests to detect exposure to the pathogen that causes mycoplasmal URTD are no longer mandated. However, in cases where recipient site owners require mycoplasmal URTD testing before relocation, Appendix 6 contains information on collection and handling of samples. Appendix 6 also provides guidance for the accommodation of symptomatic tortoises (i.e., those individuals that show signs of illness, especially respiratory disease) and those that test positive for mycoplasmal URTD or other diseases.

IV. TYPES OF PERMITS

Authorized Gopher Tortoise Agent Permit

Note: Authorized agents included under this type of permit are not authorized agents of FWC, but rather individuals authorized to handle gopher tortoises. These permits are not issued for scientific collection or research on gopher tortoises.

This permit authorizes the permittee, referred to as an authorized agent, to undertake those activities specified by the permit, including surveying, trapping, marking, transporting, relocating tortoises and tortoise commensals (e.g., gopher frog, pine snake, Florida mouse). The specific activities that an authorized agent is granted permission to perform will be listed on the permit. Authorized Agent permits also allow assistants to work under the authorized agent's supervision if these assistants are registered with the FWC. The permit must be carried at all times by the agent and assistants when conducting permit-related activities. Authorized Agent permits will not allow relocation of tortoises except when accompanied by a 10 or Fewer Burrows permit, a Conservation permit, a Temporary Exclusion permit, or a Disturbed Site permit for a specific project.

Authorized agents must be well-qualified to perform the gopher tortoise conservation actions for which they are requesting permission. Agents will likely be the first point of contact for citizens when they are advised that gopher tortoises are protected. Agents must accurately represent FWC policies, guidelines, and rules to their clients and to the general public. As a benefit of receiving this permit, agents will have access to a streamlined online permitting process for certain gopher tortoise permit approvals.

This permit is conditional so that it can be withdrawn, suspended, revoked, or not renewed for just cause, as determined by FWC. In cases where agents or their assistants violate FWC rules, policies, or guidelines concerning gopher tortoises; engage in unethical or illegal behavior; falsify gopher tortoise permit applications or monitoring reports; or violate conditions of any gopher tortoise permit, the agent permit may be immediately suspended pending an investigation. Substantiated violations will result in appropriate action, up to and including revocation, at FWC's discretion. Any person whose Authorized Agent permit is revoked will be ineligible for any gopher tortoise related permits for some period of time, depending on the severity of the violation.

Requirements for Authorized Gopher Tortoise Agents

Individual people may submit an application to FWC in order to be authorized to perform different activities related to gopher tortoise conservation. Not all agents will have the interest and the required expertise to perform all activities listed below. Each agent permit will clearly state what the agent is allowed to do and will be conditioned accordingly. Agent permits are authorizations to the agents and the assistants under their supervision to conduct the activities specified. The agent permits do not allow capture, possession, or transport of gopher tortoises unless a relocation permit specific to the development project or activity impacting gopher tortoises or their burrows has also been issued. All experience submitted in support of the application for an Authorized Gopher Tortoise Agent permit must have been from actions conducted in compliance with the FWC gopher tortoise permitting guidelines and standards.

Gopher tortoise surveys:

Applicant must have completed either 1) at least 120 hours conducting gopher tortoise surveys over the past year, or 2) a cumulative total of 480 hours conducting gopher tortoise surveys.

Completion of an FWC-approved training course module in gopher tortoise surveying may be substituted for the experience requirements.

Gopher tortoise capture using bucket trapping *or* live trapping *or* hand shovel excavation:

Applicant must have captured, with no gopher tortoise injuries or mortality, either: 1) an average of 10 gopher tortoises per year by a single method over a four-year period, or 2) a cumulative total of 40 gopher tortoises captured by a single method. Applicants are to list experience for each method separately in the agent permit application, as applicable.

Completion of an FWC-approved training course module in gopher tortoise capture methods may be substituted for the experience requirements.

Gopher tortoise capture using a modified pulling rod:

The applicant must have captured, with no gopher tortoise injuries or mortality, an average of 10 gopher tortoises per year over a four-year period by safely using a modified pulling rod. Applicants must include references to the permits under which the claimed experience was earned.

Certification of additional agents beyond those who meet these criteria will be considered only after further evaluation of this technique by FWC in April 2010.

Note: Not all tortoises can be captured by pulling. Therefore, pulling cannot be used as a method for verifying that a burrow is unoccupied. Pulling may be used only in combination with trapping or backhoe/hand excavation to assure that every tortoise is relocated from a designated donor site.

Completion of a training course will not be accepted in lieu of the experience requirements listed.

Transport, marking, and release of gopher tortoises:

The applicant must have completed, with no gopher tortoise injuries or mortality, either: 1) an average of 10 gopher tortoises per year transported, marked, and released over a four-year period, or 2) a cumulative total of 40 gopher tortoises transported, marked, and released. These activities are considered together as one skill in the agent permit application.

Completion of an FWC-approved training course module in gopher tortoise transport, marking, and release methods may be substituted for the experience requirements.

Collection of blood samples:

The applicant must have completed, under the direct supervision of a qualified veterinarian or other appropriately authorized person, the successful collection of 10 blood samples from gopher tortoises.

Completion of a training course will not be accepted in lieu of the experience listed.

Supervision of gopher tortoise burrow excavations using mechanical equipment:

The applicant must demonstrate with no gopher tortoise injuries or mortality, either: 1) on-site experience of supervising at least 50 gopher tortoise burrow excavations, with the successful extraction of at least 20 gopher tortoises (include references to the permits under which those occurred), or 2) on-site experience under the supervision of another Authorized Gopher Tortoise Agent who was directing backhoe operators in the excavation of at least 50 gopher tortoise burrows, with the successful extraction of at least 20 gopher tortoises, with the applicant actively participating in the recovery of gopher tortoises from the excavated burrows (include references to the permits under which those occurred).

Completion of an FWC-approved training course module in this activity, combined with experience directing backhoe excavation of 30 gopher tortoise burrows with successful extraction of at least 12 gopher tortoises, may be substituted for the full experience requirements above. Burrows mechanically excavated during the approved course in which the applicant actively directed excavation efforts without instructor input can count toward the excavation experience requirement; however, excavation must be conducted under the direct on-site supervision of an Authorized Gopher Tortoise Agent permitted in this technique.

It is the agent's responsibility to select operators of mechanical excavating equipment that are appropriately experienced and to direct their activity in a way that minimizes threats to gopher tortoises, commensal species, and persons assisting with the excavation. The authorized agent must be on-site at all times while mechanical excavation is being performed.

Authorization to train:

Authorized gopher tortoise agents may be authorized to train others in the activities and techniques associated with trapping, handling, and relocating tortoises with completion of a FWC-approved training course. Applicants must specify which courses and sections they will be teaching and provide a letter from the approved training entity verifying employment or agreement to train.

Application Criteria

All applications for the Authorized Agent permit must be from an individual, and the appropriate mitigation contribution as established in these guidelines must be paid before issuance of the permit. Applicants for this permit must provide standard contact information, satisfactory proof of knowledge, and specific gopher tortoise related experience in support of each of the activities they are requesting a permit to conduct. Applicants must list permit numbers under which experience was obtained for each skill listed in their application. For surveys, the applicant may list properties (and the associated gopher tortoise habitat acreages) surveyed, purpose of surveys, and documentation of completion and submittal of survey results where experience was acquired but no FWC permit applications were submitted, instead of listing permit numbers (since permits are not always obtained after surveying efforts). Applicants must swear and affirm that they have committed no wildlife violations in Florida, that the information submitted in the application and supporting documents is complete and accurate, that any false statement may result in criminal penalties, and agree to abide by all applicable state, federal, and local laws. .

Professional certification by any industry body or trade group established for this purpose (gopher tortoise agent authorizations) in the future and approved by FWC may also be provided as supplementary documentation of knowledge and experience.

Note: Approval of courses for certification of gopher tortoise agents shall be at the discretion of the FWC Executive Director or his delegate.

Grounds for Suspension, Revocation or Nonrenewal of Agent Permit

Agents are responsible at all times for their own actions and for the actions of any other person assisting them with their permitted activities. The following will be considered by FWC as grounds for suspension, revocation, or nonrenewal of the permit issued to an agent:

- violations of gopher tortoise related rules, guidelines, or permit conditions
- surveys not conducted in adherence with guidelines
- significant numbers of burrows missed on surveys
- falsification of data submitted to FWC
- failure to appropriately supervise and direct persons assisting them

Assistants to Authorized Agents

An authorized agent may be assisted by additional persons. These assistants will be under the supervision of the authorized agent and must adhere to all rules, guidelines, and permit conditions when conducting activities relating to gopher tortoises. They must carry a letter from the agent designating them as an assistant and a copy of the authorized agent's permit with them at all times while engaged in activities related to the permit. Such assistants must be directly supervised on-site by the authorized agent during blood collection and mechanical excavation of burrows. Assistants are not authorized to conduct any gopher tortoise related actions without approval of the authorized agent.

Relocation Permits for Properties with 10 or Fewer Burrows

This type of permit is available when 10 or fewer burrows (and the number of tortoises occupying those burrows) will be impacted on a development site. Application requirements, recipient site criteria, and tortoise handling procedures differ somewhat for this permit type (see Appendix 11.). In cases of phased developments, this permit may be obtained only once for any development on a single identified parcel or within a project under a common plan of development, platting, or subdivision/project name, whichever is largest. As part of the 10 or Fewer Burrows permit application process, the permit applicant must complete the required e-Learning (available online at MyFWC.com/GopherTortoise) or the approved equivalent written training, if the applicant is not an authorized gopher tortoise agent.

Most typical activities associated with residential lawn and landscape maintenance do not require a permit, provided they do not collapse gopher tortoise burrows or harm gopher tortoises. Activities that do require a permit are listed in Section II, Determining If a Permit Is Required. Contacting an authorized agent or FWC before implementing any construction or major habitat modifications is advised.

Consultants who are not Authorized Gopher Tortoise Agents may apply on behalf of property owners for 10 or Fewer Burrows permits when all tortoises will be relocated on-site. The consultant must complete a Registered Agent profile within the online permitting system and complete the e-Learning curriculum. Once submitted, this automatically issued status allows a Registered Agent to apply on behalf of the property owner for permits that do not otherwise require the use of an Authorized Gopher Tortoise Agent. Only property owners can be listed as permittees. Relocation activities for Registered Agents are limited to on-site relocation only using bucket trapping, hand shovel excavation, and live trapping to capture the gopher tortoises. The Registered Agent is not a permit, nor does it provide any authorizations not included in a separately issued 10 or Fewer Burrows permit. (Authorized Gopher Tortoise Agents may conduct activities specified by their permit and do not need to apply to become Registered Agents.)

10 or Fewer Burrows Permit with On-Site Relocation

This permit authorizes landowners or other individuals who have completed FWC online e-Learning to capture gopher tortoises (via bucket trapping, hand-shovel excavation, or live trapping) and to relocate tortoises to an on-site location within the property boundaries of the development specified in the application. [**Note:** Only an authorized agent permitted to supervise burrow excavations may capture or attempt to capture gopher tortoises using a backhoe.] On-site recipient area criteria can be found in Appendix 11. Landowners may obtain the assistance of an authorized gopher tortoise agent for on-site relocations (as described in *Authorized Gopher Tortoise Agent* above).

Release of tortoises must be accomplished in such a way as to preclude tortoises from returning to their burrows. This permit type requires the temporary installation of filter fabric (silt fencing) or other comparable fencing (buried at least eight inches deep) along the outer edge of the

construction right-of-way to block tortoise re-entry into the area of disturbance on the project site during construction activities. This temporary exclusion fencing must be removed following completion of construction activities. Penning is allowed only under this permit type, and only under specified circumstances (see Appendix 11).

10 or Fewer Burrows Permit with Off-Site Relocation

This permit authorizes gopher tortoises to be relocated off the development property to a permitted recipient area (a long-term protected site or a short-term protected site). An authorized agent must perform this relocation on behalf of the permittee. Authorized agents must have their own permit from FWC for working with gopher tortoises and may assist the landowner or developer in obtaining all permit approvals for this type of action.

Conservation Permit

Conservation permits for relocation of tortoises on-site or off-site will be issued when more than 10 burrows will be impacted on a development site and for subsequent activity on properties undergoing development of phased projects when a 10 or Fewer Burrows permit has been previously issued.

This permit authorizes gopher tortoises to be relocated either on-site or off-site of the development property. The permittee must have an authorized gopher tortoise agent perform this relocation. Authorized agents must have their own permit from FWC that authorizes them to conduct the activities required to relocate the gopher tortoises, and they may assist the landowner or developer in obtaining all permit approvals for this type of action.

One of the four objectives of the *Gopher Tortoise Management Plan* is to increase the acres of permanently protected gopher tortoise habitat by providing incentives to landowners who protect habitat under perpetual conservation easements. These protected acres of habitat provide a net conservation benefit and assurance for long term protection and management of the species. Restocking lands where populations have been depleted is another important Plan objective which will also help to reach the Plan's goal. Therefore, mitigation contributions for gopher tortoise relocation are scaled based on the length of assurance for protection and management of the species at recipient sites.

The mitigation contribution for Conservation permits is determined by the level and duration of habitat protection and management provided by the recipient site to sustain gopher tortoises. Conservation permits issued for gopher tortoises relocated to a long-term protected recipient site will require a \$200 mitigation contribution for the first group of ten burrows (up to five tortoises) and a \$300 mitigation contribution per tortoise thereafter. If the tortoises are being moved to a short-term recipient site, a \$200 mitigation contribution will be required for the first group of ten burrows (up to five tortoises), and a \$3,000 mitigation contribution will be required per tortoise thereafter. Gopher tortoises that are relocated to an unprotected recipient site will require a \$3,000 mitigation contribution per tortoise (see Table 1).

Conservation permits that involve on-site relocation to undeveloped areas that provide suitable tortoise habitat but that are not protected or do not meet the size criteria for a permitted recipient site will require a \$3,000 mitigation contribution for each tortoise. Final stocking density is limited to two per acre (including tortoises already on-site) within the designated recipient area. On-site relocation to an area that provides habitat protection equivalent to the requirements for a short-term protected recipient site will require \$200 for the first 5 tortoises and an additional \$3000 for each tortoise relocated on site.

On-site relocation may be authorized to areas that meet the criteria for a long-term protected recipient site, or that share a common boundary with public conservation land. However, a separate long-term protected or public conservation lands recipient site permit must be obtained before gopher tortoises are relocated to the on-site area (see Recipient Site Permits below). Mitigation contributions for tortoises relocated to these on-site areas under this separate permit qualify for the lower mitigation amount included in Table 1.

Recipient Site Permits

Criteria for Relocation of Gopher Tortoises to Recipient Sites

The overall conservation goal of the *Gopher Tortoise Management Plan* is “to restore and maintain secure, viable populations throughout the species’ current range in Florida.” Property owners play a significant role in helping Florida achieve this goal by providing the highest level of security for the gopher tortoise and its habitat on permitted recipient sites. Elements that are integral to meeting this objective include appropriate habitat management, population monitoring, legal protection, and long-term financial assurance provided by the landowner. Not all recipient sites afford relocated gopher tortoises with the same level of protection, however some sites do provide conservation value by restocking tortoises to managed lands where populations have been depleted, furthering research efforts, preventing the loss of tortoises on development sites, helping to retain local or regional tortoise resources and potentially contributing to the habitat preservation objective if such sites receive long-term protection in the future.

The *Gopher Tortoise Management Plan* contains a series of measurable objectives and conservation actions which include restocking gopher tortoises to protected, managed, suitable habitats where they no longer occur or where densities are low. Likewise, some of the future research goals outlined in the *Gopher Tortoise Management Plan* may require the use of sites that receive displaced tortoises to carry out research projects and consequently be designation of research recipient sites. The criteria for research recipient sites are outlined in Appendix 13 and is intended to provide further clarity as to how the agency will implement conservation actions specified in the Plan.

To receive a FWC recipient site permit, candidate properties must meet site suitability criteria for size, soil, and habitat. Site suitability criteria vary according to the level of conservation value provided by the recipient site.

A. Conservation Easements or Other Protection: The conservation value of a permitted project and the required mitigation contribution is determined by the level of protection afforded to the relocated gopher tortoise at the recipient site. Four levels of conservation have been defined:

- **Long-term Protected Recipient Sites:** These privately or publicly owned recipient sites must be protected by a perpetual easement that conforms to the standard format available from FWC (see Appendix 8). Conservation easements that were previously granted by landowners to other regulatory, governmental, or conservation entities may be acceptable to FWC if their conditions and restrictions provide habitat protection and management requirements for gopher tortoises and their habitats that are comparable to those contained within FWC's standard easement. However, those easements would need to be modified to designate FWC as a co-grantee.
- **Recipient Sites for Restocking Public Conservation Lands:** *(This section is under development.)*
- **Short-term Protected Recipient Sites:** These recipient sites have some enforceable protection commitment, but those commitments do not meet the definition of "long-term."
- **Unprotected Recipient Sites:** These recipient sites provide relocated gopher tortoises protection for at least two years.

B. Size: Perimeter boundaries of recipient sites should ideally be configured in the form of a block, circle, or similar shape. Uplands are considered contiguous if two or more upland communities occur within a distance of 1,000 feet, and there is no physical obstacle (e.g., paved road open to the public, railroad bed, impenetrable fence, river, lake) to prevent tortoise movement to other upland areas within the recipient site. For administrative purposes, FWC will evaluate and authorize use of up to 1,000 acre portions of recipient sites in phases; however, only a one-time mitigation contribution of \$500 will be required for permitting a recipient site.

- **Long-term Protected Recipient Sites:** Recipient sites must contain a minimum of 40 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation. Smaller sites in highly developed counties, particularly in southern Florida, will be evaluated on a case-by-case basis, and will be allowed if they are instrumental in retaining the local tortoise resource and can be appropriately managed to perpetuate the relocated population. Sites containing greater than 200 acres of contiguous suitable upland habitat will satisfy the size threshold for *Desirable* criteria and may be eligible for an additional 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density (see below).
- **Recipient Sites for Restocking Public Conservation Lands:** *(This section is under development.)*
- **Short-term Protected Recipient Sites:** Sites must contain a minimum of 25 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation.
- **Unprotected Recipient Sites:** Sites must contain a minimum of 25 acres of contiguous suitable upland tortoise habitat that meet the criteria for soil and vegetation.

- C. **Soils:** Soils that meet *acceptable* criteria are moderately well-drained to excessively drained, with a depth to water table (DWT) value of 45 centimeters (1.5 feet) or greater. For sites in flatwoods, land cover maps should be overlain on soils maps to help differentiate hydric areas from more mesic or xeric areas; site visits by FWC may also be required. Poorly drained soils with a DWT greater than 31 centimeters (one foot) may meet the *Acceptable* criteria, provided that the proposed site contains augmentation features (i.e., spoil piles or berms) or is drained by ditches, etc. In these select cases, there must be evidence of past or current use by tortoises; additionally, stocking densities cannot exceed two per acre on these soil types. Long-term protected recipient sites with a DWT of 130 centimeters (4.3 feet) or greater meet the *Desirable* criteria threshold and may be eligible for a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density. Site-specific soil information can be obtained by referring to the Natural Resources Conservation Service (NRCS) Web Soil Survey (www.soils.usda.gov) for the appropriate county.
- D. **Vegetation Features:** Sites with *Acceptable* habitat features are those that contain both of the following: average herbaceous cover of at least 30% and average canopy cover of 60% or less. Long-term protected sites with average herbaceous cover greater than 50% and average canopy cover less than 40% meet the *Desirable* criteria threshold and may be eligible for a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density. Herbaceous cover (low-growing, soft-stemmed plants) should include broadleaf grasses and, preferably, grass-like asters (sunflower family) and legumes (bean family). Vegetation survey methods are outlined in Appendix 7.
- E. **Enhanced Conservation Value:** Proposed long-term protected recipient sites may be awarded a 0.5 tortoise per acre increase in the site evaluation maximum allowable tortoise density if FWC determines that the site has enhanced conservation value by any of the following: 1) adjacency to existing public or private conservation lands that together provide >200 acres of contiguous suitable upland gopher tortoise habitat that satisfy the threshold for *Desirable* criteria; 2) the site boundaries are 100% within a designated Strategic Habitat Conservation Area; or 3) at least 75% of the recipient site is vegetated with one or more of the following native upland plant communities: sandhill, scrubby flatwoods, or dry prairies (Table 2).
- F. **Baseline Densities:** Survey techniques to determine the existing (baseline) tortoise population density are provided in Appendix 4. Supporting information should include potential reasons for low tortoise densities (e.g., past harvest; previous, but now rectified, inadequate habitat management). The burrow survey used to generate this estimate must be performed no more than 90 days before the date the permit application is submitted. A map showing the site boundaries, transect locations, locations of all documented tortoise burrows, and corresponding tortoise densities will serve as the baseline for future monitoring efforts.
- G. **Site Evaluation Stocking Rate:** The site evaluation stocking rate is defined as the maximum allowable gopher tortoise density as determined by the scoring process depicted in Table 2, *Acceptable and Desirable Criteria Thresholds for Recipient Site*

Characteristics. A site that meets all three *Acceptable* criteria will be assigned an evaluation stocking rate of two tortoises per acre. Evaluation stocking rates for long-term protected recipient sites may increase in increments of 0.5 individual per acre for each *Desirable* criterion that is met, up to a maximum of two additional individuals (four per acre total).

H. Determination of Final Stocking Rate: The final stocking rate for a recipient site equals the site evaluation stocking rate minus the baseline density, i.e., final stocking rate = (site evaluation stocking rate) - (baseline density). For all calculations involving stocking rate, consider only tortoises greater than or equal to 130 mm (5 inches) in carapace length. Eggs and juvenile tortoises less than 130 mm are not considered in these calculations because of their low survivorship and minimal effect on the recipient site forage base.

When assigning the baseline density and calculating the final stocking rates, applicants submitting permit requests for sites that have been previously approved by FWC and used as a recipient site for tortoise standard relocation and/or incidental take permits shall include the number of resident tortoises reported for the site when it was originally approved and all tortoises released at the site under previously issued FWC permits (or authorized for release when no post-relocation reports have been sent to FWC).

I. Enclosure Methods: Restraint of tortoises inside an enclosure at the recipient site for a minimum period of six months is required for all relocations as a condition of the relocation permit. This process is called “soft release.” Recent studies have indicated that site fidelity is enhanced by temporarily enclosing tortoises. Because there is still insufficient scientific knowledge regarding tortoise carrying capacity, tortoise response to relocation, post-relocation site fidelity, social interactions between relocated and resident tortoises, and possible disease transmission through relocations, FWC is establishing experimental guidelines at this time to initiate relocation within temporary enclosures and to evaluate the effects. As additional information becomes available, these guidelines may be modified to ensure that they achieve the management plan objectives. The following guidelines include enclosure methods and procedures proven to be effective.

- All tortoises relocated to any recipient site (including unprotected recipient sites) shall be released into a temporary enclosure as described below and retained within the enclosure for a period of not less than six months and no more than twelve months. However, there is no maximum enclosure time limit for recipient sites that are permanently fenced in their entirety and that are stocked at a density equal to the approved final stocking density for the site.
- Applicants with special circumstances may apply to be released from this requirement. Special circumstances include the following: recipient sites with natural or artificial boundaries to restrain most tortoises (e.g., islands, coastlines, major rivers or large lakes, existing fencing that prevents the passage of all tortoises released at the site).
- Tortoises shall be released into temporary fenced enclosures at no more than 1.5 times the approved overall final stocking density for the site. However, the maximum number of gopher tortoises approved by FWC for release into the entire recipient site parcel shall not be exceeded. Enclosures within recipient sites with

varying approved stocking rates may be stocked at 1.5 times the approved density for the area in which the enclosure is located. If an enclosure encompasses an area with varying approved stocking rates, then the enclosure's approved gopher tortoise density will be proportional to the number of acres in each approved stocking rate area. For example, if a 40-acre recipient site initially containing no gopher tortoises includes a 15-acre enclosure encompassing five acres that are approved for a final density of two gopher tortoises per acre and ten acres that are approved for a final density of three gopher tortoises per acre, then the enclosure can receive up to 60 gopher tortoises $1.5 [(5 \times 2) + (10 \times 3)]$.

- Temporary enclosures may be of any material that prevents the passage of tortoises of all sizes released to the site. Recommended and cost-effective materials include Belton Industries #935 pre-assembled silt fence (a more durable type of silt fence; see Glossary for purchasing information) and hay or pine straw bales.
- With the exception of hay or pine straw bales, temporary fencing must be buried at least eight inches into the ground to prevent tortoises pushing beneath the enclosure and must be at least two feet high and of sufficient robustness to prevent tortoises pushing or climbing over.
- Temporary fencing must be regularly monitored and maintained to repair damage and maintain the integrity of the temporary enclosure.
- Tortoises observed above ground and tortoise burrow numbers and activity status within the temporary enclosures shall be monitored weekly for the first month and monthly thereafter to document any problems with relocated tortoises (e.g., illness, mortality, evidence of human poaching, emigration). The FWC permitting office must be contacted if decreases in tortoise numbers are documented.

J. **Management Plan:** Gopher tortoise habitat requires active management. A detailed management plan mirroring the length of protection is a vital part of gopher tortoise conservation efforts on all FWC-permitted recipient sites. Management plan requirements are outlined in Appendix 3.

Table 2. *Acceptable and Desirable* Criteria Thresholds for Recipient Sites

SITE CHARACTERISTIC	ACCEPTABLE CRITERIA	DESIRABLE CRITERIA
Size	> 40 acres	> 200 acres
Soil	> 45 cm DWT, with land cover verification for flatwoods sites >31 cm (select cases)	>130 cm DWT
Habitat	> 30% herb cover < 60% canopy cover	>50% herb cover <40% canopy cover
Enhanced Conservation Value		Adjacent to protected land, or in Strategic Habitat Conservation Area, or $\geq 75\%$ native upland community (maximum of 0.5 per acre)
Maximum Allowable Gopher Tortoise Density	Two per acre (requires all above criteria be satisfied)	0.5 per acre for each site characteristic that is satisfied, up to a maximum of two additional (four per acre maximum)

Temporary Exclusion Permit for Major Linear Utility Corridors

This type of on-site relocation conservation permit is specifically reserved for the installation or maintenance of major linear utility transmission lines (e.g., major natural gas or electric transmission lines). This permit applies to situations that require the temporary exclusion of tortoises from the utility construction corridor and where habitats within the corridor will be restored to provide suitable habitat for tortoises following completion of the utility installation. These permits require the temporary installation of filter fabric (silt fencing) or other comparable fencing (buried at least eight inches into the ground) along the outer edge of the construction right-of-way to block tortoise re-entry into the corridor during construction activities. The FWC will also consider other proposed options of keeping gopher tortoises out of harm's way in the immediate area of construction on these types of projects.

Temporary exclusion permits authorize the capture of tortoises from within the utility corridor right-of-way project area and their immediate release on the other side of the temporary fencing into adjacent suitable habitat. Tortoises must be released outside the project corridor in close proximity relative to where each tortoise was captured. The gopher tortoise density after relocation within the designated recipient area shall not exceed either three tortoises per acre, or 1.5 times the existing gopher tortoise density within the recipient area, whichever is greater.

This does not authorize placement of tortoises on properties not under control of the permittee. The permittee must obtain written approval from the adjacent landowner granting permission to the permittee to release the tortoises on the landowner's property. The temporary fencing must be removed following completion of the utility project and after the habitat has been restored. Tortoises can then naturally reoccupy restored habitat within the utility corridor.

Gopher tortoises may be released into an on-site enclosure in conformance with the FWC enclosure requirements. Enclosures shall not be located on the opposite side of barriers which deter tortoises from returning to the location where they were originally captured. Enclosure fencing shall be removed before expiration of the permitted maximum temporary exclusion time period or upon project completion, whichever comes first. The final gopher tortoise density within the enclosure shall not exceed three gopher tortoises per acre.

The application information requirements for this permit are the same as for conservation permits with on-site relocation of the affected tortoises. This permit is not intended, and will not be issued, for the installation of local utility service lines that are being installed as a precursor to development or to facilitate the development of the adjacent or surrounding area (e.g., infrastructure for specific development projects, planned subdivisions, or multiple projects or subdivisions). Permit applications for those projects must address impacts to all tortoises and tortoise burrows contained within the entire planned project development boundaries. Major utility projects that include the construction of permanent structures used to service or maintain the installed utilities (e.g., gas compressor stations, water wells, pumping stations) do not qualify for a Temporary Exclusion permit and must be permitted separately to permanently relocate gopher tortoises.

Burrow or Structure Protection Permit

Burrow or Structure Protection permits are available when the integrity or utility of an existing structure is jeopardized by one or two burrows and therefore poses a public safety concern (e.g., burrow under a propane tank), or if the safety of the resident tortoise is compromised (e.g., burrows in a grass parking lot, dirt driveway, etc.). Application requirements and tortoise capture and handling procedures are similar to those for 10 or Fewer Burrows permits (See Appendix 11); however, tortoises relocated under a Burrow or Structure Protection permit shall only be relocated on-site. This type of permit may only be issued once a year for a contiguous property under the same ownership. As part of the application process, the applicant must complete the required online training (available at MyFWC.com/GopherTortoise) or the approved equivalent written training, unless the relocation activities are conducted by an Authorized Gopher Tortoise Agent.

In most cases, it is best to live with tortoises and their burrows. Relocations are stressful for gopher tortoises. The process takes time, money, and physical labor. Typical activities associated with residential lawn and landscape maintenance do not require a permit, provided the activities do not collapse gopher tortoise burrows or harm gopher tortoises. Activities that require a permit are listed in Section II, Determining If a Permit Is Required. Visit

MyFWC.com/GopherTortoise or contact FWC for more information on living with gopher tortoises.

On-Site Relocation under the Burrow or Structure Protection permit

This permit authorizes landowners or other individuals who have completed FWC online training to capture gopher tortoises (via bucket trapping, hand-shovel excavation, or live trapping) and to relocate tortoises to an on-site location within the property boundaries specified in the application. [**Note:** Only an authorized agent whose permit authorizes the supervision of burrow excavations using mechanical equipment may capture or attempt to capture gopher tortoises using a backhoe.] On-site recipient area criteria follow the same criteria as the 10 or Fewer Burrows permits and can be found in Appendix 11. Landowners may obtain the assistance of an authorized gopher tortoise agent for on-site relocations, as described under *Authorized Gopher Tortoise Agent Permit* above.

Release of tortoises must be accomplished in such a way as to preclude tortoises from returning to their burrows. Penning is not allowed under the Burrow or Structure Protection permit. These permits may require permanent or temporary fencing in an appropriate configuration to exclude tortoises from returning to the compromised burrow. Collapsing or filling those burrows is required upon capture and relocation of the resident tortoises. If fencing is necessary, a brief explanation should be provided in the application addressing why and what methods will be used to restrict tortoise access.

Tortoises cannot be relocated off-site under a Burrow or Structure Protection permit. If adequate suitable gopher tortoise habitat is not available on-site and tortoises must be moved off-site, applicants may qualify for a 10 or Fewer Burrows permit.

Emergency Take without Relocation Permit

This permit will be issued only under limited and specific circumstances, in cases where there is an immediate danger to the public's health and/or safety or in direct response to an official declaration of a state of emergency by the Governor of Florida or a local governmental entity. Applications submitted for this permit must include all information that is required from any other applicant seeking a conservation permit, along with a copy of the official declaration of a state of emergency. This permit process may be handled after the fact or at least after construction activities have already started. It is preferred that contact with FWC should be made as soon as possible to minimize adverse impacts to gopher tortoises and their burrows.

This section does not cover what should happen when a local emergency requiring immediate action to protect human safety and welfare, property, and wildlife and its habitat occurs. Because it is not possible to anticipate every circumstance (*e.g.*, a local oil spill along a highway that contaminates soil adjacent to a gopher tortoise burrow), the best solution would be for anyone encountering an emergency to contact FWC as soon as possible and to request assistance in determining the best course of action to take.

Disturbed Site Permit

Criteria for Relocation of Gopher Tortoises from Disturbed Sites

The Disturbed Site permit may be required in situations where premature disturbance to the vegetation or ground has occurred before gopher tortoise burrow surveys are complete or before gopher tortoise capture and relocation activities have been completed. This permit provides an option for mitigation and relocation of tortoises within disturbed portions of the project area. These permits are not punitive and may or may not be issued in association with FWC law enforcement investigations, but will not be issued until all associated FWC law enforcement investigations have been completed. Survey, capture, and relocation activities must be conducted by an Authorized Gopher Tortoise Agent.

Disturbed Site permits are issued when ***all five criteria*** below are met:

- Evidence of site disturbance to the ground or vegetation must be present on the site and within suitable gopher tortoise habitat
- Site disturbance either:
 - Prevents complete and accurate tortoise burrow surveys from being conducted (15% and 100% surveys as described in FWC guidelines) or
 - Prevents FWC staff from conducting on-site inspections to verify 15% or 100% survey results prior to site disturbance commencing
- Site disturbance either:
 - Impacts 10% or more of the suitable gopher tortoise habitat on the property or
 - Shows evidence of impacts to tortoise burrows.
- Either of the following applies:
 - A past, valid, tortoise burrow survey of the disturbed area exists, showing burrows were present or Evidence of tortoise burrows is visible within the disturbed area, on the property where disturbance occurred, or on adjacent properties.
- Disturbance to the project site has occurred within the past 18 months.

The criteria above may be met before a tortoise permit application has been received by FWC, during the permit application process, or after a permit has been issued, depending on when disturbance activities occur.

If the project site meets all criteria before 100% burrow survey reports and maps are submitted to FWC, or before the 72-hour waiting period after which such reports have been received by FWC, or before the completion of gopher tortoise capture and relocation activities, then active relocation permits or permit applications will be revoked or denied so that a Disturbed Site permit application may be submitted.

In cases where only a portion of the project site is prematurely disturbed and all relocation activities will not be covered under a Disturbed Site permit, another relocation permit (e.g.,

Conservation permit) may be issued for the remainder of the property. This only applies when discrete and contiguous, undisturbed areas of the project site can be identified.

Disturbed sites require different burrow survey protocols and conversion factors for estimating numbers of tortoises present and calculating mitigation contributions. Refer to Appendix 4 for details.

Mitigation Contributions, Refunds, and Recipient Site Requirements

All mitigation contributions must be submitted before Disturbed Site permits are issued. Mitigation contributions for Disturbed Sites are higher than for other relocation permits to mitigate for tortoises which may be buried underground or have left the project site in response to disturbance activities and cannot be relocated.

All project sites fit into one of two categories: “10 or Fewer Burrows” or “More than 10 Burrows.” Projects where an estimated 10 or fewer burrows were impacted and no more than an estimated five tortoises were impacted fit into the “10 or Fewer Burrows” category. Projects where more than 10 burrows or five tortoises were impacted fit into the “More than 10 Burrows” category.

The entire project site is considered when determining the permit category, including any undisturbed areas (which are permitted separately, if present). For example, a project site with an estimated five tortoises inside disturbed areas and three burrows outside disturbed areas would fit into the “More than 10 Burrows” category.

Disturbed Site Permit for 10 or Fewer Burrows

The mitigation contribution for this category is \$500 for each tortoise estimated present within the disturbed area. For each tortoise relocated to a permitted long-term or short-term protected recipient site, a refund of \$250 per tortoise will be provided by FWC. Tortoises may also be relocated on-site, if suitable set-aside areas exist; however, no refunds will be provided for such relocations. If additional tortoises beyond the original estimated number are relocated, no additional mitigation is required and no refunds are provided.

Disturbed Site Permit for More than 10 Burrows

The up-front mitigation contribution for this category is \$500 per tortoise for the first five tortoises estimated present within the disturbed area, and \$4,000 for each additional tortoise estimated to be present within the disturbed area. All tortoises captured must be relocated to permitted long-term protected recipient areas. FWC will provide a \$250 per tortoise refund for the first five tortoises relocated and a \$2,000 per tortoise refund for all additional tortoises relocated. In rare instances where additional tortoises are captured beyond the original estimated number, an additional mitigation contribution of \$300 per tortoise will be required for these individuals (refunds are not provided for these additional tortoises).

Due Process for Gopher Tortoise Permit Applicants

The FWC adheres to the time requirements specified in Chapter 120, Florida Statutes, for processing permit applications. Upon submittal of an application, FWC staff will respond within 30 days requesting any additional information from the applicant. Upon receipt of all information necessary to complete an application, FWC staff will prepare and issue a permit within 90 days (but attempt to accomplish this within 45 days). Any person has a right to challenge the action of FWC on a given permit application. Each permittee is provided an “Election of Rights” form with the issued permit that conveys instructions for filing an informal or a formal hearing request.

Any non-permitted person who believes that their substantial interests would be affected by the action taken by FWC on a gopher tortoise permit application may also petition the agency for a hearing. For information on how to submit such a request, please contact: The Office of General Counsel, Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

Deviations from permitting requirements shall be granted only when the person subject to the requirements demonstrates a substantial hardship not intended by these guidelines and which violates principles of fairness. The person must also demonstrate the goals of the underlying Gopher Tortoise Management Plan will be or have been achieved by other means. For purposes of considering granting a deviation, “substantial hardship” means a demonstrated economic, technological, legal, or other type of hardship to the person requesting the deviation. For purposes of considering granting a deviation, “principles of fairness” are violated when the literal application of rules or guidelines affects a particular person in a manner significantly different from the way it affects other similarly situated persons.

V. HANDLING OF COMMENSAL SPECIES DURING RELOCATIONS

As the keystone species of Florida’s uplands, the gopher tortoise provides refuge to some 350-400 other species. These commensal species may be intimately tied to tortoise burrows or may be occasional visitors, but the underground microhabitats serve as multi-purpose retreats that are used for feeding, resting, reproduction, and protection from temperature extremes, moisture loss, and predators. Threats to commensal species are similar in nature to those faced by the gopher tortoise and have been addressed in the Gopher Tortoise Management Plan. One of the objectives outlined in the Management Plan is to promote the responsible, humane relocation of burrow commensals encountered during relocation efforts. An added benefit is the likely increase in biodiversity when commensals are released with the tortoises on recipient sites. The guidelines in Appendix 9 have been created to provide guidance for authorized agents who capture commensal species during gopher tortoise relocations. Emphasis is placed on four listed species, with the understanding that these species have habitat needs that generally go beyond those of the gopher tortoise and will, therefore, need to be considered during relocations.

APPENDICES**Appendix 1. Rules and Policies Protecting Gopher Tortoises and Their Burrows****RULE:**

68A-27.004 Designation of Threatened Species; Prohibitions; Permits.

(2) The gopher tortoise (*Gopherus polyphemus*) is hereby declared to be threatened, and shall be afforded the protective provisions specified in this subsection. No person shall take, attempt to take, pursue, hunt, harass, capture, possess, sell or transport any gopher tortoise or parts thereof or their eggs, or molest, damage, or destroy gopher tortoise burrows, except as authorized by Commission permit or when complying with Commission approved guidelines for specific actions which may impact gopher tortoises and their burrows. A gopher tortoise burrow is a tunnel with a cross-section that closely approximates the shape of a gopher tortoise. Permits will be issued based upon whether issuance would further management plan goals and objectives.

Florida Fish and Wildlife Conservation Commission

620 South Meridian Street, Tallahassee, FL 32399

POLICY ; POSITION ; GUIDELINE .TITLE: **Gopher Tortoise enforcement**

APPROVAL AUTHORITY: OFFICE OF EXECUTIVE DIRECTOR

DATE:

GENERAL POLICY STATEMENT**Agricultural, Silvicultural, and Wildlife management activities**

This policy is for the purpose of enforcement of Chapter 68A-27 relating to Gopher tortoises with respect to agricultural and silvicultural activities or activities intended to improve native wildlife habitat. The adoption of the Gopher Tortoise Burrow rule does not expand pre-existing gopher tortoise regulatory prohibitions or change existing policy or practice with respect to agricultural and silvicultural activities.

An illegal take of a gopher tortoise burrow includes, but is not limited to, damaging, collapsing or covering a gopher tortoise burrow from land clearing, bulldozing, grading, paving, or building construction associated with land development, without a permit issued under Chapter 68A, Florida Administrative Code.

Gopher tortoise or gopher tortoise burrow permits are not required to conduct agricultural activities, silvicultural activities, or activities intended to improve native wildlife habitat. Such activities include, but are not limited to, tilling, planting, mowing, harvesting, prescribed burning, mowing, disking, roller-chopping, and tree-cutting.

Burrow prohibition

The prohibitions related to gopher tortoise burrows will not be applied when a landowner can demonstrate that those burrows are no longer used by gopher tortoises by conducting a gopher tortoise survey in accordance with FWC guidelines.

As stated in Chapter 68A-27 "gopher tortoise burrow" is defined as a tunnel in the ground with a cross-section that closely approximates the shape of a gopher tortoise.

Solely for the purpose of this policy, the presence of one or more of the following characteristics indicates that gopher tortoises or gopher tortoise burrows may be present:

- (a) Ground surrounding a burrow entrance shows evidence of gopher tortoise activity including but not limited to presence of a gopher tortoise; gopher tortoise eggs or egg shell fragments; impressions from the bottom shell of the tortoise;

3/6/2008

1 of 2

- foot-prints or tracks left by tortoises; scat; obvious feeding trails radiating out and extending into surrounding vegetation);
- (b) Sand mound from the burrow excavation apparent at the burrow entrance;
- (c) Located in well-drained to moderately well-drained, sandy soils;
- (d) Located in sandhill, scrub, coastal dunes, flatwoods, dry prairie, dry hammock communities, or any disturbed version of these plant communities (such as, but not limited to, pastures, old fields, yards, power line corridors, roadsides);
- (e) Other burrows with the shape defined above, and with one or more of the characteristics described in (a)-(d) above, located on the site or in proximity on adjacent property.

This policy will remain in effect until replaced with policy or rule.



Kenneth Haddad, Executive Director

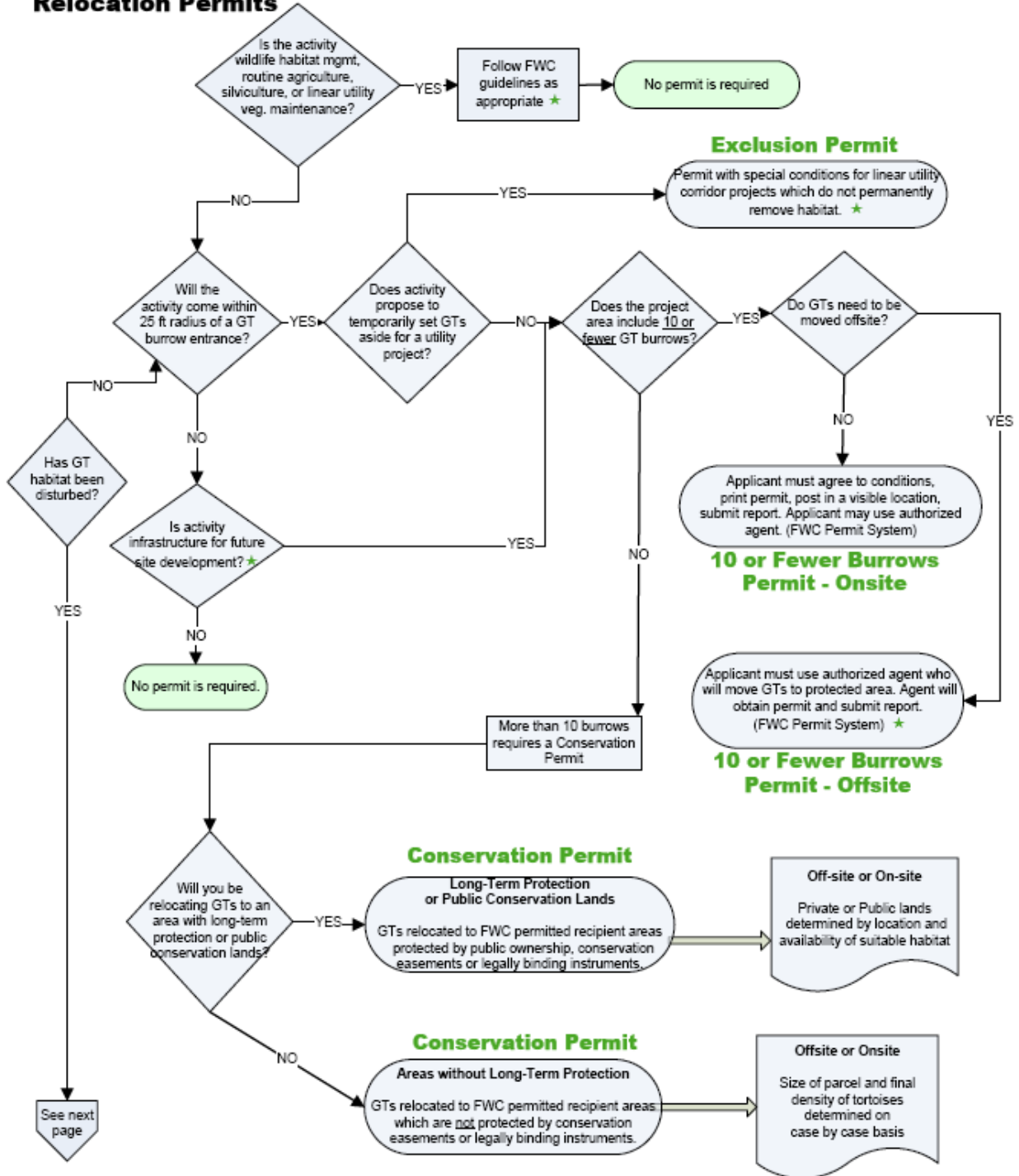
3/6/08
date

Appendix 2. FWC Gopher Tortoise Permitting System Process Map

Gopher Tortoise Permitting System

Part 1 of 2

Relocation Permits

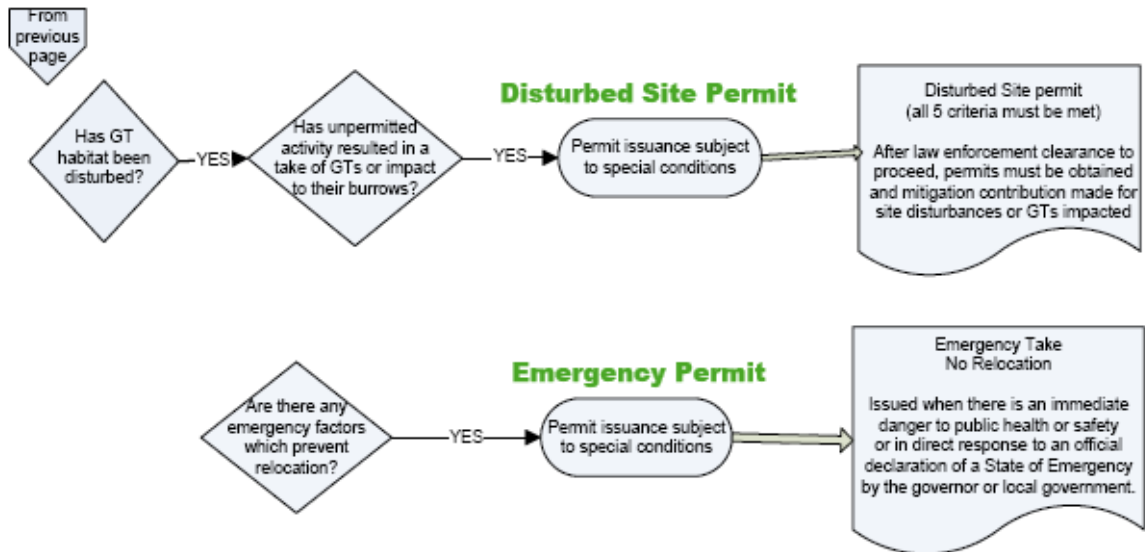


★ See guidelines or glossary for details.

Gopher Tortoise Permitting System

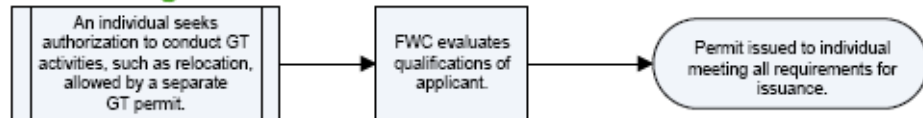
Part 2 of 2

Special Permits

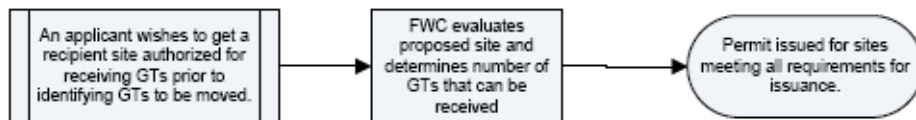


Authorizing Permits

Authorized Agent Permit



Recipient Site Permit



February 2010

Appendix 3. Information Needed for Relocation Permit Applications and Recipient Site Permit Applications

Although each permit type has additional specific information that will be required on application forms either online or in hard copy, this appendix outlines the primary information that FWC staff will need to process applications for relocation permits and recipient site permits.

General information needed for relocation permits and recipient site permits:

1. Name and contact information of the authorized agent that will be performing the gopher tortoise activities. Mailing and physical addresses are needed, as well as phone and facsimile numbers and e-mail addresses.
2. Certification: Applicant must certify by signature that the information and supporting documents submitted are complete and accurate.
3. Name and all contact information for the property owner (for development sites, also provide the developer's name and contact information if different from that of the property owner).
4. Location map and directions to the site: Must provide sufficient detail (e.g., identify all adjacent roads, water bodies, and other major physical landmarks) to allow vehicular access for FWC inspection. All maps submitted during the application process should be in an 8.5x11-inch or 8.5x14-inch in format.
5. Most current digital orthoquad or equivalent one-meter resolution aerial photograph of the site: Scale of 1 inch = 800 feet or less.
6. Parcel identification: Provide latitude/longitude coordinates; section/township/range; parcel identification number (PID), which can be obtained from the county property appraiser's office; and deed showing proof of ownership. For development sites, also provide the name of the project; for recipient sites, provide the name of the property (if applicable). For temporary exclusion permit applications for major utility corridors, PIDs are not required, and latitude/longitude coordinates must be provided for only the beginning and end points of the utility corridor.
7. Habitat types: Provide a table listing existing land uses (i.e., vegetation community types) by acres (along with corresponding land cover maps) for the entire project and for all potential tortoise habitats to be impacted. For temporary exclusion permit applications, completion of the land use table is optional, but the land cover map must be provided. For recipient site applications, provide this habitat information (and maps) for the entire property and for the specific phase or parcel within the property proposed for relocation/restocking. For each community type on recipient sites, describe the condition, characteristics, land use history, and other factors that may

influence tortoise habitat quality and/or manageability. Accepted sources for land use classifications are as follows:

- Florida Department of Transportation (DOT)–Florida Land Use, Cover and Forms Classification System (FLUCFCS);
 - Florida Natural Areas Inventory (FNAI); or
 - FWC Center for Biogeographic Spatial Assessment-LANDSAT (i.e., satellite imagery).
8. **Soils:** In tabular form, provide a list of soil types, depth to water table (DWT), and acreage for each soil found within the entire project and potential tortoise habitat to be impacted (development sites) and within the specific phase or parcel of the property proposed as a recipient site; also provide corresponding soils maps. The accepted source for soil type classification is the Natural Resources Conservation Service (NRCS) Web Soil Survey database that can be accessed at: www.soils.usda.gov. For temporary exclusion permit applications, completion of the soils table is optional, but soils maps must be provided.
9. **Current gopher tortoise population size and density (tortoises per acre):** Provide a map depicting current locations of tortoise burrows and indicate burrow activity (potentially occupied vs. abandoned, see Glossary and Appendix 4). Burrow survey methods are outlined in Appendix 4. Show all transects, as well as observed burrows and their activity status, overlain on the map of potential tortoise habitat.

Additional information required for relocation permits:

1. Provide the proposed start date for the development.
2. Indicate whether tortoises are proposed to be relocated on-site or off-site, and provide the necessary location and contact information for the designated off-site recipient area, if known. You may use the online recipient site locator mapping tool (MyFWC.com/GopherTortoise) to find available recipient sites or contact FWC. All applicants must provide proof of reserved capacity at a recipient site(s) to accommodate all gopher tortoises to be relocated from the entire permitted donor site, with the reservations maintained for the duration of the issued permit.
3. If the relocation is to occur on-site, provide all the necessary information needed for recipient sites (size of on-site preserve, location within the project, habitat types, soils, proposed stocking density, etc.). On-site recipient areas may have site-specific requirements imposed as part of the permit to reduce potential harm to tortoises. For temporary exclusion permit applications, completion of the habitat types/land use table and the soils table are not required, but the land use and soils maps must be provided.
4. For temporary exclusion permits (major utility corridors), indicate the location of the exclusion fencing on the habitat map.

Additional information required for recipient site permits:

1. **Calculated stocking rate:** As described in the criteria for recipient sites, provide both the number of additional tortoises requested for release on the site and the final, post-relocation tortoise density that would result. To calculate current tortoise population size, baseline density, and stocking rate, consider only tortoises greater than or equal to 130 mm (5 inches) in carapace length. Eggs and juvenile tortoises are not considered in these calculations because of their low survivorship and minimal effect on the recipient site forage base.
2. **Enclosures:** Requirements for using enclosures to temporarily contain the tortoises within the recipient area are described in the guidelines under Recipient Site permits. Provide information on enclosure(s) size, location, enclosure materials, and proposed tortoise density within enclosures (noting that maximum density within enclosures cannot exceed 1.5 times the final stocking density for the recipient site). Show proposed enclosure locations on a map of the site.
3. **Draft conservation easement:** Should conform to the standard format available from FWC (as found in Appendix 8); any changes to the standard must be provided with all proposed additions underlined and all proposed deletions indicated by a strike-through. Should include a survey and legal description, title search/commitment, and draft site management plan (described below).
4. **Site management plan:** Site management plans shall contain the following: both qualitative and quantitative baseline information that describes existing conditions; goals of future management actions; description of invasive exotic infestations and proposed control program; list and timeline for implementing management activities; quantifiable desired future conditions for canopy cover and herbaceous ground cover; schedule and methods for conducting tortoise population monitoring and habitat monitoring; remedial actions if proposed activities do not achieve desired results; estimate of annual management budget for the site. Below is a list of the major habitat management elements that are required as part of the application package.
 - **Base map:** Indicate property boundaries, land use cover types, management units, and baseline density transect locations with corresponding density values.
 - **Tree canopy management activities/timelines:** Describe practices and treatment intervals that will be used to maintain canopy cover at 60% or less.
 - **Ground cover management activities/timelines:** Describe practices and treatment intervals that will be used to maintain herbaceous ground cover at 30% or more; if applicable, include treatment practices for problematic exotic plants. Refer to Florida Exotic Pest Plant Council (www.fleppc.org) for a list of species.
 - **Compatibility of proposed land uses:** Describe what types of land uses are proposed for the site and how activities related to these land uses would be

conducted to foster the open canopy and herbaceous ground cover noted above, while not adversely affecting the ability of gopher tortoises to excavate and maintain their burrows or to otherwise inhabit and utilize the site.

- *Other habitat enhancement proposed:* Describe proactive measures that could enhance tortoise site fidelity, e.g., berms, spoil piles, forage plantings, fencing.
- *Tortoise population and habitat monitoring:* Recipient site operators are required to submit a summary of the habitat management conducted and the results of habitat monitoring and tortoise density surveys in a report to FWC every three years; guidelines regarding survey methods, and a template for the report, will be provided.
- *Financial assurance of management:* The purpose of the financial assurance instrument is to ensure that adequate funds will be generated and provided for the long-term management of gopher tortoise habitat within the recipient site. When FWC issues a permit for activities that impact species, the permittee may be required, as part of the mitigation, to protect property and habitat. Typically, the permit will require permittees or their successors to actively manage the property in a way that will enhance or maintain the property.

The applicant must provide FWC with information about which instrument will be used by the permittee to ensure that funding will be available for the management of the mitigation property for the duration specified in the permit. Below are examples of commonly used assurance options:

- trust agreement
- deposit of cash or cash equivalent into an escrow account
- performance bond
- irrevocable letter of credit
- certificate of professional liability insurance
- general appropriation or allocation approved by a public governing body (e.g., Florida Legislature) for habitat management (public conservation lands only)

Each of these options provides different levels of assurance to FWC and relative burden on the permittee. Other forms of financial assurance of management may not be well-suited for ensuring adequate funding of perpetual management (e.g., audited financial statement), but may still be appropriate as an interim guarantee in conjunction with another option (suitable only six months maximum from permit issuance).

If a recipient site applicant elects to use a trust agreement or escrow account option to satisfy the financial assurance requirement, either of the options described below will be considered by FWC.

1) Establish a habitat management fund endowment that is fully funded when the recipient site is established. The per-acre endowment required for recipient sites would be determined on a case-by-case basis and based on the

annual cost per-acre required to manage the site (e.g., a 200-acre site requiring \$20/acre per year for management would require an endowment of \$500/acre, or \$100,000 total). The endowment would be maintained within an interest-bearing account that generates 4% per year. The interest generated by the account would be used to conduct the required habitat management; the principal is not spent.

2) Establish a base endowment initially, with additional funds added to that endowment as each relocated gopher tortoise is received at the recipient site. The base endowment should at least be equal to the amount of money required to implement one complete cycle of habitat management within the permitted phase(s) of the recipient site (e.g., burn or roller chop the permitted recipient site). Additional funds must be added incrementally to the base endowment, as each relocated gopher tortoise is received at the recipient site, so that the habitat management endowment is fully funded by the time all gopher tortoises that have been authorized for relocation to the recipient site have been received. The specific dollar amount that must be added to the endowment for each relocated gopher tortoise depends on a number of factors, such as:

- the dollar amount needed to fund the total habitat management endowment;
- the number of gopher tortoises authorized for relocation to the recipient site; and,
- whether only interest generated by the financial assurance account will be used to fund ongoing habitat management, or if additional deposited principal funds will be used to fund ongoing habitat management.

Appendix 4. Methods for Burrow Surveys on Development (Donor) and Recipient Sites

Development (donor) Site Surveys

A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development activities (including staging areas for heavy equipment) is required in order to apply for a relocation permit (10 or Fewer Burrows permits require a 100% survey up-front, see Appendix 11). These surveys must take place no more than 90 days prior to submitting an application. Because gopher tortoises and their burrows are protected from development activities by Florida law, regulatory compliance requires a comprehensive, 100% burrow survey of all potential tortoise habitat proposed for development. These 100% surveys must be conducted no more than 90 days prior to, and no fewer than 72 hours before (excluding weekends and holidays) commencing gopher tortoise capture and relocation activities. To effectively locate all potentially occupied tortoise burrows and provide FWC staff the opportunity to check such surveys, 100% surveys and the burrow location map must be received by FWC at least seventy-two (72) hours (excluding weekends and holidays) before gopher tortoise capture and relocation activities begin. All gopher tortoise burrows must be marked with flagging tape. (See details presented below for burrow marking and survey methodology.) Site preparation for development (such as land clearing) may commence on the project site, or for phases of the project site, for which gopher tortoise capture and relocation activities have been completed (see Site Preparation Activities for Development, in Section II, for details). Site preparation which occurs prematurely may require issuance of a Disturbed Site permit (see.

Recipient Site Surveys

A minimum of 15% of potential gopher tortoise habitat must be surveyed on recipient sites that are proposed to receive relocated tortoises. This survey must be designed to assess all soil types and vegetative communities that are potential gopher tortoise habitat. The primary purpose of the recipient site survey is to obtain a density estimate of existing number of gopher tortoises per acre so that a biologically appropriate determination can be made regarding the number of relocated tortoises that can be added to the site. This value is the baseline density. The baseline density is subtracted from the maximum allowable gopher tortoise density (see Table 2), and the result is the final stocking rate for that particular recipient site.

All surveys completed by authorized agents are subject to field verification by FWC. If FWC determines that the submitted survey results provide an inaccurate estimation of the resident gopher tortoise population, either additional surveys or a re-survey may be required. If the number of gopher tortoise burrows identified on site exceeds the number authorized for capture and relocation under the existing gopher tortoise permit, the permittee must apply for an amendment and obtain an amended permit for the additional burrows from FWC before the initiating any gopher tortoise capture and relocation activities for the additional burrows.

Documentation and reporting results from development and recipient site surveys:

1. Land Cover Map: Provide an up-to-date aerial photograph of the development site or recipient site and identify all land cover types. (See acceptable types of land use classifications in Appendix 3.) All maps, including the aerial photograph, should be at a scale of one inch equals 800 feet or less. List all land cover types and associated acreage either on the map or on an accompanying table.
2. Soils Map: Attach a Natural Resources Conservation Service (NRCS) Web Soil Survey map depicting soil type and depth to water table (DWT) values for project site.
3. Gopher Tortoise Habitat Map: Provide a map that delineates potential tortoise habitat on the project site or recipient site and provide an acreage estimate by land cover type.
4. Burrow Location Map: Plot and label the location of each burrow observed during the burrow survey. Attach a table that shows the burrow label, activity class (see below), and associated global positioning system (GPS) coordinates.

Gopher Tortoise Burrow Activity Classification

Potentially Occupied Burrow: This classification combines the active and inactive categories and, therefore, includes burrows with obvious sign of use and those with minimal or no obvious sign of use. A potentially occupied burrow is in good repair, with the classic half-moon shaped entrance. These burrows may have tortoise tracks or plastron scrapes clearly visible on the burrow floor or on the mound, or they may have subtle or no tortoise sign. The lack of observable tortoise sign may be due to weather or season. The burrow floor may contain loose soil caused by tortoise activity or it may be hard-packed. The burrow mound may or may not have vegetation growing on it, and it may be partially covered by fallen leaves. Potentially occupied burrows must be recorded on burrow location maps and used to calculate gopher tortoise densities.

Abandoned Burrow: An abandoned burrow appears unused and dilapidated. The entrance is partially or completely collapsed, and the burrow is partially or completely filled with leaves or soil. Recent rains, or recent activity by livestock or humans, do not appear to be the primary reason for burrow collapse. There are no trails into the burrow that might indicate that a tortoise recently passed through the leaf litter or that a small tortoise is using a dilapidated adult burrow. Abandoned burrows must be recorded on burrow location maps but **not** included in tortoise density calculations.

Burrows that are < 130 mm (5 inches) in width shall be recorded on burrow location maps. Potentially occupied and abandoned burrows of this size must be permitted and shall be included in tortoise density calculations. Mitigation contributions are required for burrows and tortoises in this size class found on donor sites., Refunds will be provided by the FWC for relocated juvenile tortoises (less than 130 mm carapace length) after a refund request

form is submitted by the permittee or its agent and the permit's final after action report is approved by the FWC.. These juvenile gopher tortoises must be relocated to the approved recipient site but they are not counted against a recipient site's remaining capacity to receive gopher tortoises after the final after action report for a permit is submitted and it is approved by the FWC.

Burrow Survey Methods (Minimum of 15%)

1. Using evenly spaced belt transects, distribute these transects across all potential tortoise habitat within the designated donor or recipient site to provide at least 15% coverage. This initial step is a map exercise (see illustration below), and transect locations should be indicated on the gopher tortoise habitat map.
2. Maximum dimensions for each individual transect are 250 meters (820 feet) long and 16 meters (52 feet) wide. The area covered by this size transect is approximately one acre (0.4 hectare). In areas with heavy cover, the width of each transect must be reduced to allow for 100% detection of burrows within the transect, and the total area covered by the transect must be recalculated to adjust for the reduced width.
3. One or multiple observers may conduct these burrow surveys. When multiple observers are used, sufficient distance must exist between observers to ensure that transects do not overlap. It is essential that observers focus solely on searching for burrows. They should not be performing vegetation sampling (i.e., on recipient sites) concurrently or conducting other activities.
4. Provide GPS coordinates for all burrows observed within, or partially within, the boundaries of each transect. GPS data taken with sub-meter accuracy in Decimal Degrees using the data settings of North American Datum of 1983 (NAD83 feet) Albers/High Accuracy Reference Network (HARN) is preferred, but not required. Burrows shall be marked with flagging tape indicating the burrow's label and activity class. This will assist field verification of surveys by FWC. The burrow label, status, GPS coordinates, accuracy of data and projection the coordinates shall be recorded and reported to FWC so that the burrow can be identified later.
5. For each transect, report the raw data in a table (transect dimensions, number of burrows by activity class, number of burrows by size class, and burrow density per acre). For the donor or recipient site, report the average tortoise density using the following calculation:

$$\frac{(\text{Total Potentially Occupied Burrows})}{(\text{Total Acres within Survey Area})} \times (0.50) = \text{Tortoises / Acre}$$

Estimating the Gopher Tortoise Population within a Donor Site:

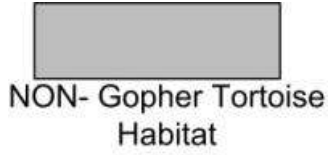
Tortoises/Acre multiplied by the Number of Acres of Potentially Occupied
Gopher Tortoise Habitat = Estimated Number of Tortoises Present

Calculating the Gopher Tortoise Stocking Density for a Recipient Site:
Site Evaluation Maximum Allowable Gopher Tortoise Density minus the
Baseline Density = Final Stocking Rate

Calculating the Number of Gopher Tortoises that can be released within a Recipient
Site:

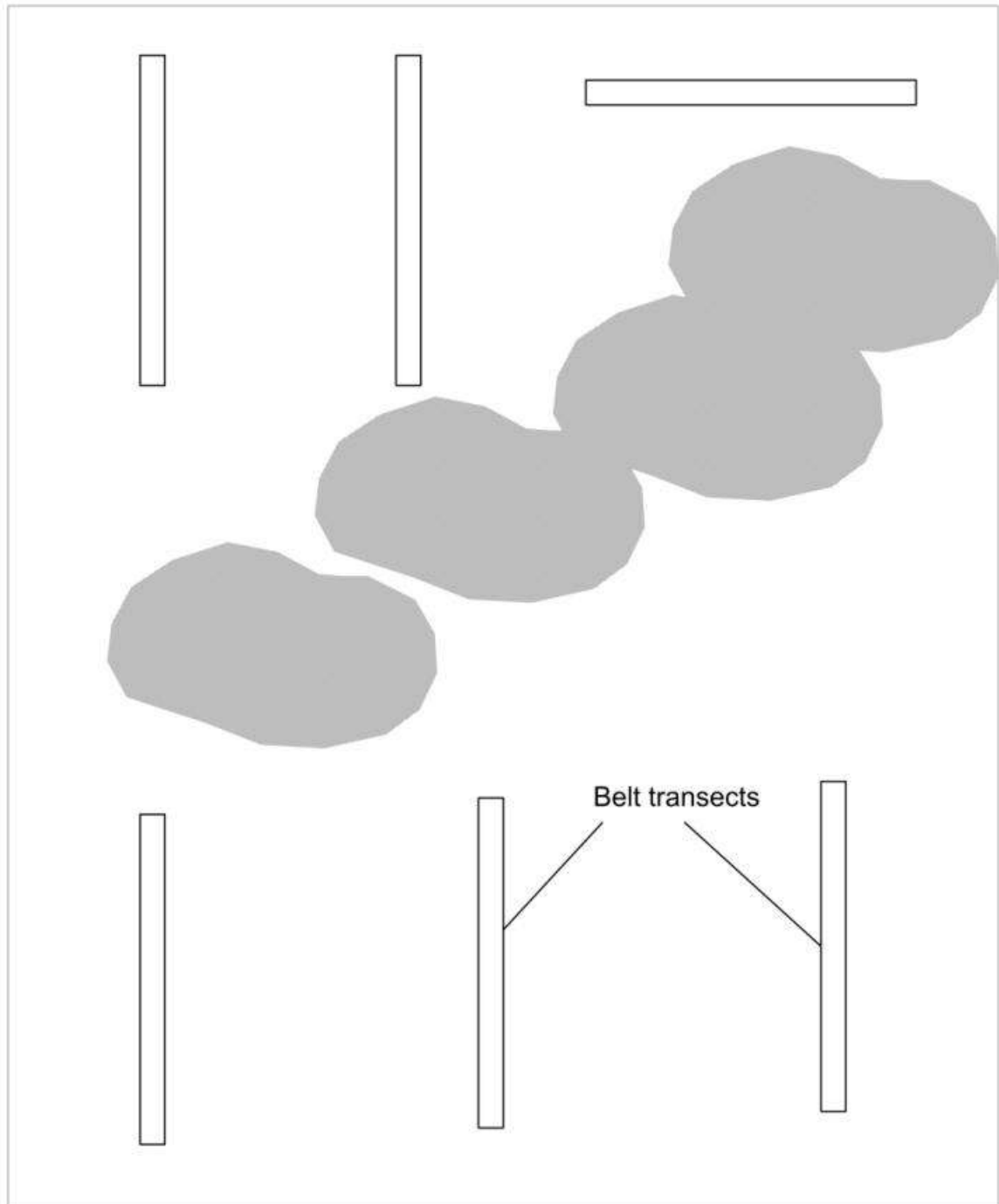
Final Stocking Rate multiplied by the number of Acres of Gopher Tortoise
Habitat = Number of Gopher Tortoises Allowed to Be Released

Example of burrow survey using belt transects:



Belt Transects need to cover 15% of the area(s)
identified as suitable gopher tortoise habitat.

50 Acre Development Site with 40 acres of
Suitable Habitat requires 6 acres of survey
area within the transects.



Burrow Survey Methods (100%)

1. All potential gopher tortoise habitat that will be impacted by development activities must be searched for burrows. The recommended approach is to systematically search the entire impact zone by traveling parallel transects spaced appropriately for the habitat conditions (i.e., the length may be consistent or vary with the shape of the site, but the width should allow 100% detection of burrows). The search can be conducted by one or more observers. Transect edges should be marked with flagging to ensure complete coverage. In open habitat, such as mowed pasture or natural sandhill, transects should be spaced no more than 10 meters (33 feet) apart. In thicker habitat, such as flatwoods and scrub, transects should be spaced as close as five meters (16 feet) apart. Patches of extremely thick habitat, such as saw palmetto or blackberry patches, should be searched more intensely, with spacing at approximately one meter (three feet) or less.
2. All burrows observed (i.e., potentially occupied and abandoned) should be marked with flagging tape that indicates the burrow's label and activity class. This will assist field verification of survey by FWC. The burrow label, status, and GPS coordinates should be recorded and reported to FWC so that the burrow can be identified later.

Surveys Conducted in Application for a Disturbed Site Permit

In cases of an application for a Disturbed Site permit, a modified survey protocol is required. It is necessary to estimate both the number of tortoises within the disturbed area and (if applicable) the number of tortoises outside the disturbed area which are still within the boundaries of the project site. Different survey protocols are required for these two types of areas.

Once site disturbances within the project area cease, a minimum 28-day waiting period (this may be longer depending on temperature and season) is required before tortoise burrow surveys are conducted within disturbed areas. This gives tortoises time to dig out of collapsed burrows. Following this waiting period, 100% burrow surveys must be conducted throughout the disturbed area to provide an estimated number of tortoises present. Impacted burrows showing recent evidence tortoises have dug out receive a conversion factor of 1.0 (one tortoise present for each burrow identified). All other burrows receive the usual conversion factor of 0.5 (50% burrow occupancy rate).

These new 100% survey results must then be compared to one of the following surveys/options:

1. An "older, acceptable survey" of the disturbed area (surveys must not be more than one year old from the time new 100% surveys are completed, and must have been conducted in accordance with survey protocols in this document).

2. A 15% survey of remaining undisturbed tortoise habitat within the project site (see survey methodology below). Survey area must be large enough to represent 15% of the total acreage of the project site.
3. A 15% survey adjacent to the project site (must be similar habitat to the project site and large enough to represent 15% of the total acreage of the project site).
4. If survey methods above cannot be conducted for some reason, the applicant may estimate tortoise numbers within the disturbed area using a standard density of 2 gopher tortoises/acre.

Results of the 100% survey within the disturbed area are compared with results from one of the four options above. The method which estimates the highest number of tortoises within the disturbed area will be used to calculate up-front mitigation costs for Disturbed Site permits.

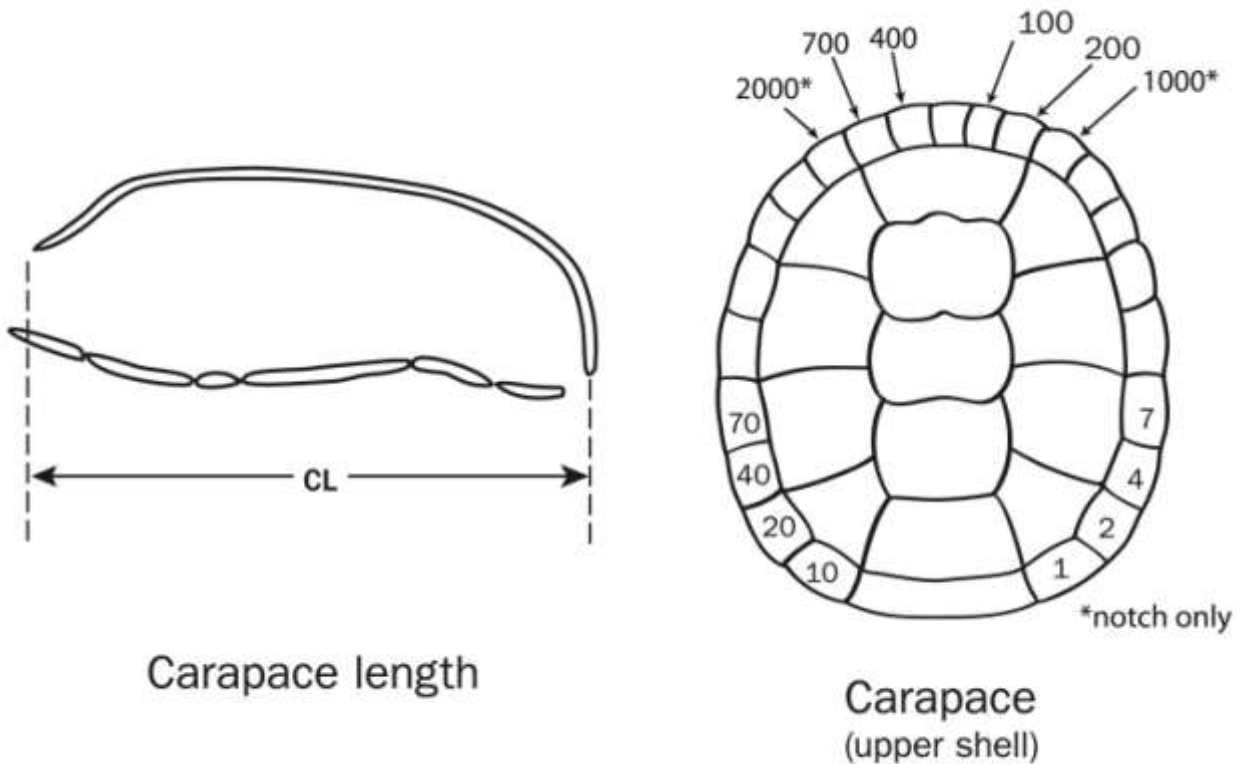
An estimate of the total number of tortoises for the entire project area must also be calculated. In some cases, the disturbed area already covers the entire project site. In other cases, undisturbed habitat remains within the project site. If a 15% survey has already been conducted (option 2 above), then this survey can be used to estimate the number of tortoises outside the disturbed area. In other cases, a 15% survey must be conducted which is large enough to represent at least 15% of the remaining acreage of undisturbed suitable gopher tortoise habitat left on-site.

Estimated numbers of tortoises from the disturbed area and any undisturbed areas (when applicable) are combined for an estimate of the total number of tortoises on the project site. This total number determines which type of Disturbed Site permit is issued to the applicant.

Appendix 5. Marking and Measuring Gopher Tortoises during Relocations

Marking: Tortoises must be permanently and uniquely marked by drilling holes in, or using a triangular file to notch, one or a combination of the eight rearmost marginal scutes (the four right ones and the four left ones) and the two right and left front marginal scutes. Each scute is assigned a numerical value, as illustrated below. The scheme is additive; e.g., tortoise #14 would require the drilling of the first scute left of the rear marginal and the third scute right of the rear marginal. For indicating numbers 1000-3999, notch (**do not drill**) the third marginal(s) to the right and left of the front central scute (nuchal), as shown in the figure below. For numbers >3999, contact FWC. The size of the drill bit or triangular file should be relative to the size of the tortoise, but no more than 25% the width of the marginal scute. Drilling or notching should be carefully undertaken to avoid injury to the limbs or head. Also, holes should be drilled closer to the marginal edge (without breaking through the edge) rather than higher up on the scute. PIT (Passive Integrated Transponder) tags may be used as an alternative to drilling or notching marginal scutes. These microchips are about the size of a grain of rice and are injected into a tortoise's hind leg using a hand-held applicator. A hand-held scanner reads the tag's electromagnetic code and displays the tag's number.

Measuring: Straight-line carapace length (CL) must be recorded in millimeters. (See below.) Forestry tree calipers are useful for measuring the carapace. Tortoise weight (in grams) should also be recorded.



Appendix 6. Health Considerations for Gopher Tortoises during Relocations

Making Decisions Regarding Relocations and Tortoise Health Assessments

Although relocation removes individual tortoises from harm on sites proposed for development, the transport of tortoises to new areas carries with it an inherent risk of exposure to infectious diseases for both recipient and donor populations. Determining the degree of risk and, therefore, the need for assessing tortoise health involves consideration of the following: the conservation value of the recipient site; whether tortoises exist within, or adjacent to, the recipient site; and the overall goals of the relocation. (See Table 1, below). Relocations to sites with high conservation value and established or adjacent populations, for example, carry a greater risk of adversely affecting these priority populations and, therefore, would generally warrant a correspondingly greater scrutiny of the relocated tortoises. Health assessments include physical examinations and the collection of biological samples (e.g., blood) for diagnostic tests. Currently, the only available blood test for a known gopher tortoise disease involves blood sampling for mycoplasmal upper respiratory tract disease (URTD; see below); however, even this well-documented test only indicates whether a tortoise has been exposed to the disease-causing organism; it does not provide information on whether the tortoise currently *has* the disease.

Table 1. Recipient Population Conditions, Goals, Disease Issues, and Suggested Health Assessment Needs

Recipient Population	Established or Adjacent Populations	Goals	Disease an Issue?	Health Assessment Needs
Highest conservation value (relatively large sites with long-term protection and management)	Yes	Healthy populations; minimize risks to adjacent/ existing populations	Yes—can impact both recipient and donor populations	Maximum on both donor and recipient populations. Monitor for success.
Highest conservation value	No	Healthy populations	Yes—due to established conservation goal	Maximum. Monitor for success.
Moderate conservation value (smaller protected sites or large sites with non-perpetual easements)	Yes	Healthy populations; minimize risks to adjacent/ existing populations	Yes—can impact both recipient and donor populations	Moderate, or based on land manager’s guidelines and risk to adjacent populations.
Moderate	No	Site specific	Questionable—	Based on land

conservation value			depends on goals and site specifics	manager's guidelines. Monitor for success.
Minimal conservation value (sites with no long-term protection; may also be relatively small)	Yes	Humane or rescue relocation. Minimize risks to adjacent/existing populations	Yes—can impact recipient and/or adjacent populations	Moderate or based on land manager's guidelines and risk to adjacent populations.
Minimal conservation value	No	Humane or rescue relocation.	No	Low. Based on land manager's guidelines.

Cursory Health Evaluations

Knowledge of normal gopher tortoise behavior and appearance is necessary when conducting health examinations. If biological samples are going to be collected, appropriate training by (or assistance from) a veterinarian or other person with extensive experience working with tortoises and collecting such specimens is required. The basic components of a physical exam include an overall assessment of the posture/behavior of the tortoise and an examination of the eyes, nostrils, skin, muscle mass, and shell. Shell measurements are not only important in determining the maturity of individual tortoises (e.g., juvenile, subadult, adult male or female) but, especially when correlated with weight, can also be helpful in assessing the overall body condition. The following are components of a cursory physical examination:

1. Overall posture/behavior: As noted above, some knowledge of tortoise behavior is necessary to discern between normal/abnormal.
 - a. Alert and responsive or quiet but responsive—these two categories identify behavioral characteristics of normal tortoises. Alert/responsive tortoises paddle their forelimbs (front legs) when held, attempt to escape, and repeatedly retract into shell when handled. Quiet/responsive tortoises are shy and tend to remain withdrawn into their shell when being handled, but they have normal strength.
 - b. Depressed and lethargic—these animals may hang forelimbs limp when lifted, may have poor muscle mass, are weak, and do not resist gentle tugging on their limbs.
 - c. Walking/moving—normally/abnormally.
 - d. Breathing sounds (normal, congestion, distress)—tortoises may normally create a very faint, high-pitched whistle when expelling air out of their nostrils. Wet or gurgling sounds associated with congestion are abnormal.
2. Examine eyes. May need a flashlight or, in some cases, magnification to examine.

- a. Clarity of eye (i.e., is cornea or lens clear or cloudy? Is there any discoloration?); position of eye within orbit (i.e., is eye bulging or sunken into orbit?)
 - b. Discharges—clear/watery or cloudy; characterize as mild, moderate, or severe.
 - c. Examine eyelids, conjunctiva (the mucous membrane that covers the exposed portion of the eyeball and the inner surface of the eye), and area around eyes—look for swelling, redness, or traumatic wounds (e.g., lacerations). Characterize severity as mild, moderate, or severe.
3. Examine nares (nostril openings).
- a. Discharges—clear/watery or cloudy/thick; describe color of discharge and characterize as mild, moderate, or severe. Note if dirt/material is obstructing nostrils.
 - b. Erosion or irregular shape of the nares (evidence of long-term discharge).
4. Examine shell (scutes and seams between scutes).
- a. Flaking, discoloration, defects/erosions, soft areas, fractures, chew marks.
 - b. Note the distribution and severity of lesions.
 - c. Photographs and drawings are extremely useful.
 - d. Measure carapace (top shell) and record tortoise weight. Note whether tortoise has urinated/defecated, as this waste elimination may significantly affect body weight.
5. Examine skin and muscles
- a. Excessive flaking, discoloration of the skin, wounds, scars, or evidence of prior injuries.
 - b. Evaluate muscle mass on head and limbs to look for muscle loss (i.e., wasting away of muscles). Note whether the head has “old man appearance”: sunken eyes; skin drawn tightly over skull).
 - c. Check to make sure the limbs are symmetric, look for swollen areas or malformations, and check toenails for symmetrical wear patterns.
 - d. Note the presence of external parasites (e.g., ticks) and number (< or > 10).

Note: Although determining the health of an individual tortoise at a particular moment in time can be difficult (i.e., certain clinical signs or “symptoms” may come and go), there are some tell-tale signs that authorized agents can watch for: nasal discharge; severely eroded nares; “old man appearance” (eyes sunken, skin drawn tightly over skull); eyes/eyelids severely swollen or reddened, with discharge; poor muscle mass and emaciated (abnormally thin) appearance. Options for accommodating individuals that appear ill, or that test positive for mycoplasmal URTD, are indicated below.

Disinfection Protocol

Caution must be taken during relocations and whenever handling gopher tortoises to ensure that authorized agents do not contribute to the spread of pathogens (germs). It is recommended that hands and equipment be disinfected between handling individual tortoises. Cleaning and disinfecting bins, traps, and other equipment between use on donor

(development) sites is required to reduce the chance of cross-contamination between populations.

Disinfection Solution: 1:20 dilution of 5% household bleach in water. A stronger 1:10 dilution of 5% household bleach in water is recommended for equipment that is particularly dirty (i.e., stained with soil or feces).

Solutions should be stored in dark bins or in opaque bottles and should be made fresh regularly (e.g., weekly, depending on storage conditions). Bleach should be purchased in small bottles or dispensed into small bottles to minimize deterioration from opening/closing the lid.

Disinfecting Equipment: Remove dirt and feces by rinsing with water (e.g., from gallon jugs) or by brushing with paper towels. Spray equipment (including drill bits and files) liberally with the bleach solution and allow to dry. Between donor sites, thoroughly scrub bins and buckets with detergent and water before spraying with the bleach solution.

Disinfecting Hands: A pump-applicator, plastic bottle of 60% ethyl alcohol is an efficient way to disinfect hands between handling tortoises; smaller pocket-size bottles of hand sanitizers are also useful in the field. If hands are extremely dirty, rinse with water before using the alcohol sanitizer.

Testing for Mycoplasmal Upper Respiratory Tract Disease (URTD)

Authorized agents or other individuals wishing to collect blood or other samples for mycoplasmal URTD tests shall be appropriately trained by a veterinarian or other person experienced in such sample collection/handling for tortoises, and they shall sign an affidavit provided by FWC stating they have been so trained. The FWC blood collecting protocol and associated affidavit can be downloaded from MyFWC.com/GopherTortoise (click on Permits and then Permitting Guidelines to locate the necessary documents regarding URTD testing). The signed affidavit, in addition to their permit, authorizes the following:

1. Blanket authorization to capture, hold, and draw blood from gopher tortoises as needed for collecting blood samples. Tortoises may be held up to 24 hours, but shall not be held for more than 72 hours, as stipulated in the FWC permitting guidelines.
2. Blood samples must be identified by the applicant's name, county, and project name. Testing will be conducted by the Mycoplasma Testing Lab, University of Florida, Department of Pathobiology, 1600 South West Archer Road - BSB 350, Gainesville, FL 32610. The Lab may be contacted at (352)294-4068, extension 3986. The applicant is responsible for all fees and costs associated with testing.
3. Test results will be provided by the testing facility to FWC and the applicant.

It should be noted that there is currently no known cure for mycoplasmal URTD, making recovery of truly infected tortoises an unlikely scenario. Recipient site owners/managers reserve the right to request mycoplasmal URTD testing or other diagnostic tests that become available for URTD or other diseases and to refuse any, or all, tortoises from populations that have seropositive and/or symptomatic individuals. Such decisions will depend on the goals and priority of the recipient site (see table above) and, thus, will reflect the level of risk involved in allowing introduction of potentially ill or infected tortoises. In those cases where several clinically ill tortoises, or tortoises that test positive for URTD or other diseases, are encountered, consultation with FWC and wildlife veterinarians will be necessary to determine how best to accommodate such populations.

Protocol for Accommodating Gopher Tortoises that Appear Ill

- Authorized agents capturing gopher tortoises at donor sites must isolate tortoises with obvious health abnormalities as outlined in this Appendix (e.g., markedly lethargic; “old man appearance”: sunken eyes, skin drawn tightly over skull; abnormally thin limbs with poor muscle mass; nasal discharge; eyes severely swollen and reddened, with discharge).
- Contact a local rehabilitation facility and transport the tortoise to the facility. A list of participating wildlife rehabilitators is provided by FWC. These facilities do not charge for assessment and treatment. Also report any ill tortoises to the FWC regional gopher tortoise conservation biologist and the contact for the targeted recipient site. Tortoises may also be treated at the Zoological Medicine Service at the University of Florida (UF) Veterinary Medical Center in Gainesville, but this service will incur a cost.
- If an ill tortoise dies (from causes not directly related to excavation or trapping) or if recently dead tortoises are found on the donor site, place the tortoise on ice (do not freeze) and notify the FWC regional gopher tortoise conservation biologist. If representatives for either the donor site or recipient site want to pursue the reason for tortoise mortality, they may deliver dead tortoises to the Pathology Service at the University of Florida Veterinary Medical Center in Gainesville for a postmortem evaluation. This service will incur a cost.

It is not necessary to interrupt capture efforts when ill tortoises are observed; these individuals can be isolated until the end of the burrow excavation or trapping for that day. Because some clinical signs of disease (e.g., nasal discharge) may appear and then disappear over time, it is helpful to photograph observed abnormalities with a digital camera.

Rehabilitation facilities or the UF Veterinary Medical Center will triage tortoises and either treat or euthanize. If the targeted recipient site refuses these tortoises post-treatment, such individuals will be accommodated as waif tortoises and either placed in captivity or in specifically designated waif sites.

Appendix 7. Methods for Baseline Vegetation Sampling and Follow-up Monitoring on Recipient Sites

Vegetation Surveys

The vegetation sampling method described below can be performed using 250-meter-long belt transects as are used to estimate tortoise density on recipient sites. Vegetation sampling shall occur at a minimum of 30% of the belt transects and be distributed across areas providing suitable gopher tortoise habitat. The beginning and end of each transect shall be permanently marked in one of two ways:

- 1) Use rebar, T-posts or other fire resistant material at least six feet high. These posts should either be painted with high visibility paint or the posts should be covered with painted PVC pipes to increase visibility and to provide the option for removal during prescribed burn; or
- 2) Use a GPS instrument capable of sub-meter accuracy to take latitude and longitude coordinates at the beginning and end of each transect. GPS data collected in decimal degrees using data type DATUM NAD83 feet Harn Albers is preferred. The data must specify the collection method (i.e., the projection and coordinates) as not all GPS instruments automatically attach a projection file with the data. The data collected must be reported to the FWC

Vegetation surveys and gopher tortoise surveys may be conducted simultaneously by multiple people, or an individual may perform each survey separately. However, at least 30% of the gopher tortoise transects shall be used as vegetation transects. For example, a 15% tortoise survey of a proposed 200-acre recipient site would require thirty 16-meter by 250-meter belt transects (each transect covering approximately one acre). Thirty percent of the transects, or 9 transects total, would be selected for vegetation sampling. Those transects selected for vegetation sampling should be located so there is representative coverage across the site. Each transect selected for vegetation sampling would have four stations associated with the 0-, 75-, 150-, and 225-meter points along the transect.

Canopy Cover—At 75-meter intervals along a transect (i.e., at the 0-, 75-, 150-, and 225-meter points along the transect), walk 15 meters perpendicular to each side of the transect line (a total of 30 meters). Every 1.5 meters (10 samples on each side), look through a densitometer (manufactured by Geographic Resource Solutions) with cross hairs and held directly overhead. Canopy vegetation is defined as woody stemmed plants three meters or greater in height. If there is canopy at the center point of the cross hairs, count that measurement as a plus. If there is no canopy cover, count that measurement as a zero. For 20 measurements, total the pluses, divide by 20, and multiply by 100 to obtain percent canopy cover at the station.

Shrub Cover—At each 75-meter interval along the transect line, walk 15 meters perpendicular to each side of the transect line (a total of 30 meters). Every 1.5 meters, hold arms outstretched approximately 1.5 meters off the ground. If the arms strike shrub

plants (shrubs can be woody plants, semi-woody plants, vines, forbs, dwarf trees, tree seedlings, canes, and palms that are approximately 1.5 meters off the ground), count that measurement as a plus. If the arms strike nothing, count that measurement as a zero. For the 20 total measurements total the pluses, divide by 20 and multiply by 100. This provides an estimate of the percent shrub cover at the station.

Herbaceous Ground Cover—At each 75-meter interval along the transect line establish an herbaceous cover sampling station. Each sampling station shall be at a known location and marked on a map. Provide GPS location coordinates and general observational directions (e.g., between wetlands 1 and 2 and approximately 50 yards from large live oak, which is located 275° from sampling station). Extra sampling stations shall be used if critical habitat changes are occurring between the 75-meter intervals.

To estimate the relative percent cover of herbaceous species in each sampling station, use a 0.25 square meter (2.7 square feet) quadrat. The quadrat can be easily made using PVC pipe. Estimates are to be based on seven cover classes: less than 1%, 1-5%, 6-29%, 30-59%, 60-75%, 76-95%, 96-100%. Record cover class for each of the following: bare ground; debris; broadleaf grasses and grass-like vegetation (e.g., sedges, rushes); wiregrass; and any forbs, vines, saw palmetto, or woody vegetation that are < 3 feet in height. If possible, identify species of exotic vegetation known to be problematic for tortoises, e.g., cogon grass (*Imperata cylindrica*). Also note the total height of the herbaceous vegetation.

Photographic Stations

Photographs shall be taken at each sampling station and shall display the general setting of the transect and herbaceous vegetation being sampled. Therefore, three photographs will be required at each sampling station: (1) a clear photograph of the vegetation inside the quadrat, (2) a photograph of the main belt transect, facing forward, and (3) a photograph of the main belt transect, facing rearward.

Reporting

Reports for baseline vegetation surveys and follow-up monitoring shall include a brief narrative explaining the property location, size, ownership, authorized agent, and Florida Fish and Wildlife Conservation Commission (FWC) Recipient Site permit number(s). This introductory information shall be followed by the qualitative and quantitative data and an overall description of the present conditions within the recipient site. Vegetative transect maps, gopher tortoise transect maps, aerial images, land use maps, and soil maps are required. Spreadsheets (tabular form) that include the percent coverage of the vegetation at each sampling station are required.

For follow-up monitoring reports, any changes of the land use and soil conditions shall be explained. A chronology (timeline) of the habitat management activities conducted since submittal of the previous baseline or monitoring report shall be provided. Major changes in vegetation (e.g., due to forestry clearing, habitat degradation from absence of fire) shall be

noted. Additionally, changes to any land management plans or other legal documents shall be attached and described in the report. If applicable, a narrative of any problems, remediation, or exceptional environmental changes that are improving the gopher tortoise habitat shall be reported (note locations). A timeline of habitat management activities proposed to occur over the next three-year monitoring period shall also be provided.

Unless otherwise stipulated, follow-up monitoring shall occur every three years. Reports shall be submitted no later than 90 days following the completion of the baseline survey or follow-up monitoring. Before the reports are deemed sufficient by FWC, the gopher tortoise regional conservation biologist will need to visit the recipient site to verify the survey and report. Additional information may be requested after the site visit.

Appendix 8. Draft FWC Conservation Easement

[NOTE TO PREPARERS: PLEASE USE “TRACK CHANGES’ WHEN YOU REVISE THIS FORM FOR SUMMITAL TO FWC. IF YOU DO NOT USE “TRACK CHANGES” FWC REVIEW OF THE FORM MAY BE SIGNIFICANTLY SLOWED.]

This instrument prepared by:

After recording please return the document to Grantee:
Florida Fish and Wildlife Conservation Commission
ATTN: Gopher Tortoise Permit Coordinator
620 South Meridian Street
Tallahassee, Florida 32399-1600

CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is given this ____ day of _____ 200_ by _____, a Florida corporation whose mailing address is _____, (“Grantor”) to the Florida Fish and Wildlife Conservation Commission, an agency of the State of Florida, with its principal office at 620 South Meridian Street, Tallahassee, FL 32399-1600 (“Grantee”).

The parties agree as follows:

WITNESSETH

WHEREAS, the Grantor is the owner of certain lands situated in _____ County, Florida, hereinafter referred to as the “Property”, more specifically described in Exhibit A attached hereto and incorporated herein by this reference; and

WHEREAS, the property possesses natural, scenic, open space, wildlife preservation and conservation values (collectively, “conservation values”) of great importance to Grantor, the people of ____ County, and the people of the State of Florida; and

WHEREAS, the specific conservation values of the Property are documented as part of the Habitat Management Plan pertaining to the Property, dated _____ (“Plan”), part of which is entitled the “Baseline Documentation”. A copy of the Plan is attached hereto as Exhibit B, and incorporated herein by reference. The Baseline Documentation is an accurate representation of the Property at the time of this grant and is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant; and

WHEREAS, Grantor intends that the conservation values of the Property be preserved and maintained by the continuation of land use patterns, including, without limitation, those relating to ____ [e.g., farming, ranching, or timber production] existing at the time of this grant, that do not significantly impair or interfere with those values; and

WHEREAS, Grantor further intends, as owner of the Property, to convey to Grantee the right to preserve and protect the conservation values of the Property in perpetuity; and

WHEREAS, Grantee is a state public agency, part of whose mission is the conservation, preservation, protection or enhancement of lands such as the Property; and

WHEREAS, the Grantor, in consideration of the issuance by the Grantee of Permit No. _____ issued by the Grantee on _____ (“Permit”) in favor of the Grantor for the incidental take of listed wildlife species, is required to grant and secure the enforcement of a perpetual conservation easement pertaining to the Property.

NOW THEREFORE, consistent with the issuance of the Permit, Grantor hereby grants, creates, and establishes a perpetual conservation easement upon the Property described in Exhibit A, which shall run with the land and be binding upon the Grantor, its heirs, successors and assigns, and remain in full force and effect forever.

1. Purpose. The purpose of this Conservation Easement is to ensure that the Property or part thereof as described in this Conservation Easement shall be protected forever and used as conservation areas, consistent with the Habitat Management Plan (“Plan”). The parties intend that this Conservation Easement will confine the use of the Property to such uses as are consistent with the purpose of this Conservation Easement.

2. Rights of Grantee. To accomplish the purpose of this Conservation Easement the following rights are conveyed to Grantee:

a. To preserve and protect the conservation values of the Property as defined in this Conservation Easement;

b. To enter upon the Property at reasonable times and upon reasonable notice to the Grantor in order to engage in activities consistent with this Conservation Easement, to monitor Grantor’s compliance with this Conservation Easement, and to otherwise enforce the terms of this Conservation Easement; provided that Grantee shall not unreasonably interfere with Grantor’s use and quiet enjoyment of the Property; and

c. To prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

3. Grantor’s Reserved Rights. Grantor reserves to itself, its heirs, successors or assigns all rights as owner of the Property including the right to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement.

4. Prohibited Uses. Unless expressly authorized in accordance with the Plan (Exhibit B), the following are prohibited activities on the Property:

a. Construction or placing of buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground.

b. Dumping or placing of soil or other substance or material as landfill or dumping of trash, waste, or unsightly or offensive materials.

c. Removal or destruction of trees, shrubs, or other vegetation.

d. Excavation, dredging, or removal of loam, peat, gravel, soil, rock or other material substance in such manner as to affect the surface.

e. Surface use except for purposes that permit the land or water areas to remain in their existing natural condition.

f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.

g. Act or uses detrimental to such retention of land or water areas in their existing natural condition.

h. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or culture significance.

i. Alteration of the Property except in compliance with the Plan.

5. No Public Access. No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.

6. Expenses; Taxes. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including the maintenance of adequate comprehensive general liability insurance coverage. Such responsibilities and costs shall include those associated with the management activities discussed in the Plan. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor. Grantor shall pay before delinquency all taxes, assessments, fee, and charges of whatever description levied on or assessed against the Property by competent authority, and shall furnish Grantee with satisfactory evidence of payment upon request.

7. Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this easement against Grantor, including, without limitation, costs of suit and attorney's fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Easement, shall be borne by Grantor.

8. Liability. Grantor and its successors shall hold harmless, indemnify and defend Grantee from and against all liabilities, penalties, costs, losses, damages, expenses causes of action, claims, demands or judgments, including attorneys fees, arising from or in any way connected with: 1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, 2) costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Property, including but not limited to the maintenance of adequate comprehensive general liability coverage, payment of taxes, and keeping the Property free of liens; and 3) the existence or administration of this Conservation Easement.

9. Remedies. If Grantee determines that Grantor or successors are in violation of the terms of this Conservation Easement, it may take any of the following actions, after 30 day written notice to Grantor or successors to correct the violation: 1) Grantee may itself correct the violation, including but not limited to restoration of any portion of the Property affected to the condition that existed prior to the violation, and demand payment from Grantor for all costs associated with such action; 2) Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Conservation Easement, for specific performance, to temporarily or permanently enjoin the violation, recover damages for violation of this Conservation Easement, including but not limited to the costs of restoration, and any other damages permitted by law. In any enforcement action Grantee shall not be required to prove either actual damages or the inadequacy of otherwise available remedies. Grantee's remedies shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. As part of the consideration for this Conservation Easement, the parties hereby waive trial by jury in any action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Conservation Easement.

10. Waiver. Grantor intends that enforcement of the terms and provisions of the Conservation Easement and the Plan shall be at the discretion of Grantee and that any forbearance on behalf of Grantee to exercise its rights hereunder in the event of any breach hereof by Grantor, its heirs, successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantee's rights hereunder in the event of a subsequent breach. Grantor hereby waives any defense of laches, estoppel, or prescription.

11. Assignment. Grantee agrees that it will hold this Conservation Easement exclusively for conservation purposes and that it will not assign its rights and obligations under this Conservation Easement except to another organization qualified to hold such interests under the applicable state and federal laws and committed to holding this Conservation Easement exclusively for conservation purposes. Not later than thirty (30) days after recordation in the Public records of _____ County, Florida of an instrument transferring the title to the property, which is the subject of this easement, Grantor agrees to give written notice to Grantee of such transfer.

12. Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

13. Notices; References. All notices, consents approvals or other communications hereunder shall be in writing and shall be deemed properly given as of the second business day after mailing if sent by United State certified mail, return receipt requested, or by overnight mail service (e.g., FedEx, UPS), addressed to the appropriate party or successor-in-interest, at the address above set forth or such new addresses as either party may in writing deliver to the other. References in this Conservation Easement to the Grantor or Grantee include their successors-in-interest.

14. Venue; Waiver of Jury Trial. This Conservation Easement has been delivered in the State of Florida and shall be construed in accordance with the laws of Florida. As part of the consideration for this Conservation Easement, the parties hereby waive trial by jury in any action or proceeding brought by any party against any other party pertaining to any matter whatsoever arising out of or in any way connected with this Conservation Easement.

15. Amendment. This Conservation Easement may be amended, altered, released or revoked only by written agreement between the parties hereto, their successors or assigns.

16. Subordination of Liens. Grantor agrees that if the Property is subject to a mortgage lien or any other form of lien or security pertaining to the Property, Grantor shall provide recorded or recordable documentation to verify that such lien or security interest is subordinate to this Conservation Easement.

17. Recording. This Easement shall be recorded in the same manner as any other instrument asserting title to real property.

TO HAVE AND TO HOLD unto grantee, its respective successors and assigns forever. The covenants, terms, conditions, restrictions and purposes imposed with this easement shall not only be binding upon Grantor but also its agents, personal representatives, heirs, assigns and all other successors to it in interest and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF Grantor has set its hand on the day and year first above written.

Signed, sealed and delivered
In our presence as witnesses:

[Corporate name]

By: _____

Name: _____

Name: _____

Title: _____

Name: _____

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 200_ by _____, the _____ of, a Florida corporation, on behalf of the corporation. The above-named individual is personally known to me or produced _____ as identification.

Notary Public State of Florida
Commission No:
Commission expires:

GRANTEE'S ACCEPTANCE

The Florida Fish and Wildlife Conservation Commission hereby accepts the foregoing Conservation Easement.

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

By: _____
Title: _____
Date: _____

Approved as to form and legal sufficiency:

FWC Attorney

Appendix 9. Handling of Commensal Species during Relocations

INTRODUCTION

Commensals are species of animals that live within gopher tortoise burrows, deriving food, refuge, or other benefits from the burrow environment. Threats to commensal species are similar in nature to those faced by the gopher tortoise and have been addressed in the *Gopher Tortoise Management Plan*. These guidelines have been created to provide guidance for authorized agents who capture commensal species during gopher tortoise relocations. Authorized agents conducting activities under gopher tortoise permits are encouraged to minimize the mortality of commensal species and, where possible, to relocate commensals with the tortoises.

RULES PROTECTING COMMENSAL SPECIES

Florida Gopher Frog (*Rana capito*)

The Florida gopher frog is listed as a Species of Special Concern (Rule 68A-27.005, F.A.C.) by the Florida Fish and Wildlife Conservation Commission (FWC). It is illegal to take gopher frogs or their eggs without a permit issued by the FWC Executive Director (Rule 68A-27.002, F.A.C.). The gopher frog is also considered a Species of Concern (SOC) by the U.S. Fish and Wildlife Service (USFWS). The SOC designation is an informal term indicating some degree of concern for the future of the species, but does not impart any U.S. Endangered Species Act protection.

Florida Mouse (*Podomys floridana*)

The Florida mouse is listed as a Species of Special Concern (Rule 68A-27.005, F.A.C.) by FWC. It is illegal to take Florida mice or their nests without a permit issued by the FWC Executive Director (Rule 68A-27.002, F.A.C.). The Florida mouse is also considered a Species of Concern (SOC) by USFWS. The SOC designation is an informal term indicating some degree of concern for the future of the species, but does not impart any U.S. Endangered Species Act protection.

Eastern Indigo Snake (*Drymarchon couperi* [= *Drymarchon corais couperi*])

The eastern indigo snake is listed as a Threatened Species (Rule 68A-27.004, F.A.C.) in Florida by FWC. It is illegal to take indigo snakes or their eggs without a permit issued by the FWC Executive Director (Rule 68A-27.002, F.A.C.). The indigo snake has also been classified as a Threatened Species by USFWS since 1978. The Federal Threatened Species designation is a formal term indicating a moderately high level of protection provided by the U.S. Endangered Species Act. For federally listed species like the indigo snake, federal permits are required to capture, handle, or relocate individuals; therefore, authorized agents should coordinate with USFWS.

Florida Pine Snake (*Pituophis melanoleucus mugitus*)

The Florida pine snake is listed as a Species of Special Concern (Rule 68A-27.005, F.A.C.) in Florida by FWC. It is illegal to take pine snakes or their eggs without a permit issued by the FWC Executive Director (Rule 68A-27.002, F.A.C.), but individuals may possess one Florida pine snake without a permit (Rule 68A-25.002[12]).

SPECIES-SPECIFIC GUIDELINES: IDENTIFICATION, HABITAT NEEDS, AND FIELD ENCOUNTERS**Florida Gopher Frog**

The Florida gopher frog is a stout-bodied frog with short legs, a large head and mouth, and prominent eyes that are slightly larger than the ear drums. The gopher frog's background color and belly are typically light gray. A series of irregular dark spots form rows along the back and side, and the limbs are distinctly striped. A raised ridge (dorsolateral fold) that is yellow or orange colored runs down each side of the back from head to groin.

The species' distribution corresponds to that of the gopher tortoise; however, unlike the gopher tortoise, the gopher frog appears to be absent from most coastal islands and dunes. This species occurs primarily in native, xeric upland habitats, particularly scrub and sandhill associations. The Florida gopher frog is extremely dependent upon gopher tortoise burrows, more so than the other listed commensals noted in these guidelines. In addition to its dependence on gopher tortoise burrows as an adult, the gopher frog tadpole only lives in isolated wetlands. These temporary water bodies generally have no fish and may have smaller populations of predatory invertebrates than permanent wetlands.

Relocation:

Gopher frogs are most commonly encountered during tortoise capture, either in bucket traps or during burrow excavation. They can also be trapped by drift fences and buckets or funnel traps set to intercept their seasonal breeding migrations to temporary or seasonal ponds and during breeding at those ponds. Frogs may be secured in plastic containers (one frog per container) with a quantity of moist soil from the burrow. Containers with frogs can be kept under the same conditions as gopher tortoises for transport. Agents who undertake tortoise relocations in central and south Florida should be aware of two exotic amphibians (Cuban tree frog and cane or marine toad) that may be confused with gopher frogs. These exotic species should not be relocated.

Gopher frogs should only be released directly into the mouth of existing tortoise burrows and only when such burrows are located on a recipient site that has temporary or fish-free ponds within 1 km (0.6 mi) distance and without significant barriers to frog movement (e.g., no roads). Several frogs may be released into one burrow.

Florida Mouse

The Florida mouse is distinguished from other rodents by the following: light reddish-tan color; comparatively large eyes, ears, and hind feet; long tail; presence of five instead of six well-developed plantar tubercles on the soles of the hind feet; fragile tail sheath that may slough off during handling; and a distinct, skunk-like odor.

The Florida mouse is endemic to Florida and is restricted largely to the northern two-thirds of the peninsula, where it typically occupies fire-maintained, xeric vegetative communities on deep, well-drained soils. The biology of the Florida mouse is closely tied to the gopher tortoise, whose burrows are used as nesting sites and refuges during dispersal. Florida mice are most common in sandhill, scrub, and scrubby flatwoods, but other xeric upland habitats may be used. These habitats are characterized by the presence of acorn-producing oak trees, especially scrub oaks and other species considered to be in the “white” oak group. The ground cover is usually interspersed with patches of bare sand, but a diverse assemblage of grasses and forbs is typically present. An open tree canopy typically composed of longleaf or other pines, may be present.

Relocation:

Florida mice can be captured alive in Sherman live traps baited with sunflower seeds and set in or near the gopher burrow entrance. Mice can also be opportunistically captured by hand during burrow excavation. Mice can be retained in Sherman traps for 24 hours, as long as they are carefully protected from extremes of heat and cold. Mice should be released at the mouth of gopher tortoise burrows at the relocation site. To maximize translocation success, mice should be released into active burrows of adult gopher tortoises. Florida mice should be released only within their known range.

Suitable habitats at the recipient site should primarily be limited to sandhill, scrub, or scrubby flatwoods. A tree layer, typically composed of longleaf or other pines, may be present; percent canopy cover should not exceed 30%. A shrub layer dominated by scrub oaks, other oaks, or other shrubby species (e.g., palmetto) should be present. The shrub layer should be discontinuous, typically 1-3 m (3-10 ft) high and with 30-70% coverage. A diverse ground cover assemblage of grasses and forbs should be present and interspersed with conspicuous patches of bare ground. Active and inactive gopher tortoise burrows should be present. The minimum size of suitable habitat patches for Florida mice probably should be 25 ha (62 acres); bigger is better. Isolated sites supporting suitable xeric upland habitat should be connected by less suitable (degraded) xeric upland or mesic habitats (native or reclaimed) considered capable of supporting tortoises. Because the maximum dispersal distance for Florida mice is not well known, suitable patches of xeric upland habitat probably should not be separated by more than 1-2 km (0.5-1 mi) to maximize the probability that Florida mice would be able to move successfully among patches.

Eastern Indigo Snake

The eastern indigo snake is a large, nonvenomous snake found throughout Florida. Its color is uniformly lustrous black except for reddish to cream coloring on the chin and throat.

Many indigo snakes in northern Florida are completely black with the exception of a white patch in the center of the throat. The indigo snake is most commonly confused with the black racer (*Coluber constrictor*), which is a duller black color, has a white chin and throat (or brown in the central Panhandle), and is smaller and thinner.

In northern Florida, eastern indigo snakes are intimately tied to gopher tortoise burrows that protect them from extreme temperatures and moisture loss. In the milder climates of central and southern Florida, especially in habitats where tortoises are not present, they rely on a wide variety of other shelters, including hollow tree root channels and logs, burrows of rodents and armadillos (*Dasytus novemcintus*), and limestone solution holes. Because indigo snakes have relatively large home ranges (hundreds of acres) and use a variety of upland and wetland habitats, large diverse recipient sites will best provide for their needs.

Encountering Indigo Snakes:

Indigo snakes may be encountered during site surveys, excavation of gopher tortoise burrows, or capture of tortoises. Snakes must be allowed to vacate the work area before conducting additional burrow excavation or other site manipulation in the vicinity. Site work may commence only after the Authorized Agent (or a registered assistant) observes the snake vacating the area. Indigo snakes may not be handled for any purpose without specific state and federal permitting authorizations.

Florida Pine Snake

The Florida pine snake is a large, nonvenomous snake with dark brown to reddish blotches on a gray to sandy-colored background. The scales on the upper part of the body are strongly keeled (ridged). The head and snout are distinctly cone-shaped and adapted for burrowing.

The species is restricted to xeric habitats in the Atlantic and Gulf coastal plains. In Florida, its historic distribution included most of the state north of Lake Okeechobee and coastal ridges to the south. Florida pine snakes spend much of their time underground, often burrowing into the tunnels of pocket gophers (*Geomys pinetis*) and other rodent prey.

Relocation:

Like indigo snakes, pine snakes may be encountered during site surveys, excavation of gopher tortoise burrows, or capture of tortoises. Snakes may be secured by gentle application of snake tongs, a stick, or other device. Unlike indigo snakes, pine snakes will often bite when captured or handled. Secured snakes should be enclosed in a cloth bag such as a pillow case or similar 'snake bag' constructed for the purpose. Alternatively, for those not wishing to handle snakes directly, snakes may be picked up with a rake or stick and dropped into a plastic garbage can with a secure lid. Snakes in bags can be placed in the same type container used for a gopher tortoise (without the gopher tortoise) and maintained under the same conditions as the tortoises until release. Snakes should be released with gopher tortoises and will make their own way to suitable cover.

Nonlisted Burrow Commensals

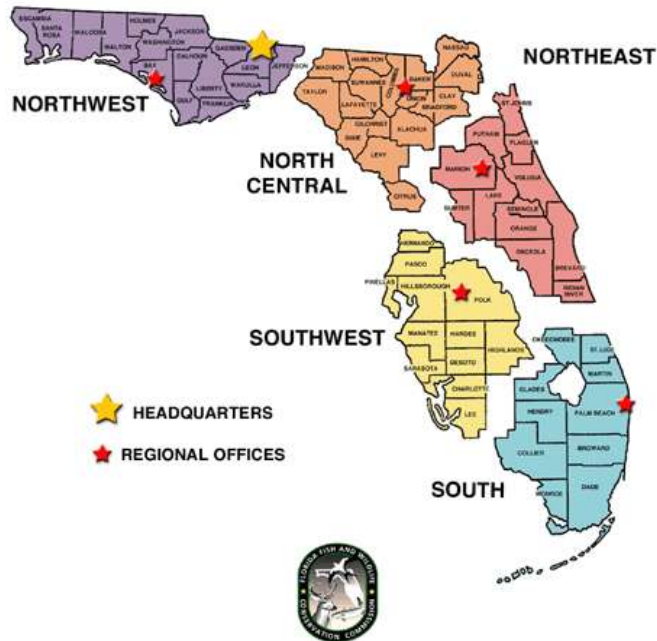
The gopher tortoise is considered to be a keystone species, one whose burrows serve as a shelter from stressful environmental conditions (e.g., cold, heat, fire, dryness), as a site for feeding or reproductive activities, or as a permanent microhabitat for some 350-400 other species. Although FWC does not require nonlisted burrow associates to be relocated, these species, if encountered, may be relocated with the gopher tortoises. This practice has important positive implications for gopher tortoises and all the listed burrow associates. For example, cave crickets (*Ceuthophilus* sp) and other burrow-dwelling invertebrates are important prey of gopher frogs and Florida mice. Few or no data exist regarding relocation effectiveness or success for these nonlisted commensals. However, by relocating the entire suite of burrow associates, the biodiversity of recipient sites will likely be enhanced.

Relocation:

Material from the bottom of a gopher tortoise burrow, including specimens of invertebrate commensals and their larvae, may be transported in any suitable container and deposited at the relocation site. In addition, burrow soil used in tortoise relocation containers may be deposited at the recipient site.

Appendix 10. FWC Gopher Tortoise Contact Information

Florida Fish and Wildlife Conservation Commission
DIVISION OF HABITAT AND SPECIES CONSERVATION
GOPHER TORTOISE CONTACT INFORMATION



For inquiries related to the Gopher Tortoise Management Plan, please contact:

Gopher Tortoise Management Plan Coordinator
 Division of Habitat and Species Conservation
 Species Conservation Planning Section
 Florida Fish and Wildlife Conservation Commission
 620 South Meridian Street (Mail Station 2A)
 Tallahassee, Florida 32399-1600
 (850)410-0656, extension 17332; SUNCOM: 278-3831
 Fax: (850)921-1847

**For specific inquiries related to gopher tortoise permitting requirements and status,
 please contact:**

Gopher Tortoise Permit Coordinator
 Division of Habitat and Species Conservation
 Species Conservation Planning Section
 Florida Fish and Wildlife Conservation Commission
 620 South Meridian Street (Mail Station 2A)
 Tallahassee, Florida 32399-1600
 (850)410-0656, extension 17327; SUNCOM: 210-0656
 Fax: (850)488-5297

MyFWC.com/GopherTortoise

Appendix 11. Modified Application Requirements, Recipient Site Criteria, and Handling Procedures for 10 or Fewer Burrows and Burrow or Structure Protection Permits

The 10 or Fewer Burrows permit is available when fewer than 10 burrows or tortoises will be impacted on a development site. These permits are intended to provide a streamlined, less expensive, and faster option for applicants impacting smaller numbers of tortoises when the gopher tortoises are relocated to suitable on-site and off-site recipient areas. Therefore, the amount of information required for applications is reduced. Applications may be checked by FWC staff, and additional information may be required in situations where submitted information is not clear or does not appear to meet criteria for this permit type.

Such permits usually are issued for smaller properties (such as single-family residential lots), but larger properties may also meet the criteria for this permit when development activities are minimal or only small numbers of burrows are present on the property.

Burrow or Structure Protection permits are available when the integrity or utility of an existing structure is jeopardized by one or two burrows and therefore poses a public safety concern (e.g., burrow under a propane tank), or if the safety of the resident tortoise is compromised (e.g., burrows in a grass parking lot, dirt driveway, etc.).

Gopher Tortoise Burrow Surveys

In order for applicants to determine if they meet the criteria for the 10 or Fewer Burrows permit, 100% surveys must be conducted over the entire development footprint and submitted as part of the permit application (rather than after issuance of the permit). The 15% survey protocol for donor sites (Appendix 4) does not apply to this permit type. Survey maps listed in Appendix 4 are recommended but not required for these permit applications, unless specifically requested by FWC staff reviewing such applications. Surveys are not required for applications to relocate tortoises for Burrow or Structure Protection permits.

On-site Recipient Site Criteria

On-site recipient areas under 10 or Fewer Burrows or Burrow or Structure Protection permits do not require separate FWC recipient site permits. Therefore, requirements under permitted long-term protected, public conservation lands, short-term protected or unprotected recipient sites do not apply. However, recipient sites must be suitable set-aside areas that are not disturbed by construction activities and provide a safe environment that excludes (through temporary fencing or other means) tortoises from development areas until such development activities have been completed or from the area where the compromised burrow(s) is located. Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2)

sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other exotic predators, human harassment, and busy roads. Such general conditions must remain after development, outside the built footprint on the site. Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this should be considered as well. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area. If the recipient area does not appear to meet these requirements, please contact FWC staff or an authorized agent to discuss conservation options that may be available.

Stocking criteria (maximum of four per acre, Table 2) do not apply. Under 10 or Fewer Burrows permits, higher on-site recipient area densities are allowed; up to five tortoises may be moved into pens for up to 10 days.

Temporary Penning of Tortoises to Exclude Them from Development Activities

For the purpose of excluding tortoises from the development footprint (for on-site relocations only), tortoises may be penned for up to 10 days, only while bucket traps or other tortoise trapping activities are in progress. Once trapping activities are complete or 10 days have passed, whichever occurs sooner, penned tortoises must be released and effectively excluded from the development footprint using temporary fencing or other means.

Pens must provide partial (but not full) shade, forage, and water. Pens must not be smaller than 100 square feet; larger pens are recommended. Sites that cannot accommodate a recipient area pen of this minimum size or larger will require the applicant to relocate tortoises off-site.

Pens should be constructed ahead of time, so tortoises may be placed in pens as soon as they are captured. Silt fence barriers should be installed around the perimeter of the construction area after all tortoises have been trapped. The silt fence should be buried 8 inches into the ground so tortoises cannot crawl under it. Land clearing should occur immediately after all tortoises are relocated out of harm's way. Tortoises trapped and released before clearing has begun may find their way back to the construction site and be injured or entombed there. Tortoises have a strong homing instinct and will try to return to their burrows if there are not barriers that discourage them from doing so.

Tortoises captured under Burrow or Structure Protection permits must be relocated to the permitted on-site recipient area immediately after capture. Penning is not allowed under this permit type.

Habitat Maps, Soil Map, and Calculated Maximum Allowable Density for Donor and Recipient Sites

Habitat maps, soil maps, and calculated stocking rate (Appendix 3) are not required for this permit application unless gopher tortoises will be relocated to an off-site recipient area or this information is specifically requested by FWC staff reviewing such applications.

Vegetation Sampling on Recipient Areas

Vegetation sampling is not required for on-site relocations under this permit type. Vegetation sampling is required for all off-site recipient areas (see Appendix 7).

Marking and Measuring Gopher Tortoises

When conducting on-site relocations, marking and measuring tortoises is not required. Marking tortoises is required for off-site relocations to permitted recipient sites (see Appendix 5).

Health Considerations

Health evaluations are encouraged for any relocation, but are not required for on-site relocations under this permit type. Off-site relocation requirements are identical to other off-site relocation permits (see Appendix 6).

Appendix 12. Gopher Tortoise Restocking Guidelines for Publicly Owned Conservation Lands

This section is under development.

Appendix 13. Criteria for Gopher Tortoise Recipient Sites to Qualify as Research Sites (created November 2009)

The FWC has historically issued Scientific Collecting permits through the Protected Species Permit Coordinator for research projects. The gopher tortoise permitting program has similarly allowed approved recipient sites to be used solely as research recipient sites for tortoises relocated from developments. Research recipient sites were not specifically addressed in the Gopher Tortoise Management Plan (“Plan”) or in the original version of the Gopher Tortoise Permitting Guidelines (“Permitting Guidelines”). This document outlines the criteria and process for research projects obtaining Research Recipient Site permits and Scientific Collecting permits for the relocation of gopher tortoises displaced by development.

The Research Recipient Site permit option is available when a previous or concurrent Scientific Collection permit has been issued for research that requires relocations to an unpermitted recipient area.

Criteria for Issuance of a Gopher Tortoise Research Recipient Site Permit

- Gopher Tortoise Research Recipient Site permits will only be issued to sites specified as part of a research project permitted under a previously issued or concurrently issued Scientific Collecting permit.
- Recipient Site permit applications will be required for Research Recipient Site permits and will subsequently be entered into the online permitting system by FWC staff.
- Research recipient sites should meet acceptable size and habitat criteria for recipient sites protected by a perpetual conservation easement; however, certain criteria may be waived according to the research needs outlined in the Scientific Collecting permit application. Appropriate documentation (e.g., soils and habitat maps) is required unless the research design demonstrates the need to waive such criteria. Like all other recipient site permit applications, a site habitat management plan is required (Permitting Guidelines, Appendix 3) and must be submitted as part of the permit application, (e.g., specific requirements regarding property size or conservation easements).
- The number of tortoises relocated to research recipient sites will be limited to the final stocking densities outlined in the Permitting Guidelines for recipient sites. Final stocking densities exceeding the two-per-acre standard (with 0.5 per acre for each site characteristic that is satisfied, up to a maximum of two additional) will be considered only if the applicant can demonstrate in the research proposal that the scientific design of the research depends on an increased density. If an increased final stocking density is permitted under the Scientific Collecting permit, FWC staff may require that tortoises be relocated upon completion of the project to achieve a sustainable final stocking density, or the permittee may be required to provide additional adjacent acreage for tortoise dispersal upon completion of the research project.
- As for other recipient site permit applications, a \$500 mitigation contribution will be required for this permit.
- As with other recipient sites, an Authorized Gopher Tortoise Agent is required to perform initial surveys and monitoring associated with Research Recipient Site permits.

- The Research Recipient Site permit does not authorize an individual to conduct research. This permit authorizes the landowner to accept relocated tortoises for scientific purposes. Multiple research projects (each with separate or the same Scientific Collecting permit) may be allowed on a single research recipient site.
- Landowners accepting tortoises under the Research Recipient Site permit will be required to submit monitoring reports of management activities for recipient sites, as outlined in the Permitting Guidelines.
- Only gopher tortoises that are designated as part of a permitted research project will be accepted to a research recipient site.
- When the permitted research is concluded, or the Scientific Collecting permit has expired or becomes invalid, the research status is no longer afforded to the recipient site. If the landowner wishes to continue to receive gopher tortoises and has capacity to receive additional tortoises following the conclusion of the research project, the property owner must apply for, and receive, a new Recipient Site permit prior to accepting any additional tortoises.

Requirements for Scientific Collecting Permits that involve Research Recipient Sites

Any Scientific Collecting permit application submitted for research involving a Research Site permit must demonstrate that the proposed research project coincides with the needs identified in the list of research topics in the Plan, or that the research project otherwise contributes to the broader management plan goals and objectives. The FWC has the discretion to limit the number of research recipient sites for a particular study topic.

- Funding sources for research project(s) must be secured prior to issuance of a Scientific Collecting permit authorizing receipt of relocated gopher tortoises.
- A letter will be required from the landowner that acknowledges and allows this research on the specified property.
- Applicants for a Scientific Collecting permit involving the use of gopher tortoises relocated from development sites will be required to submit a copy of either the application for the Research Recipient Site permit or a letter of intent from the landowner to apply for the Research Recipient Site permit.
- Applicants for a Scientific Collecting permit involving research recipient sites will be required to submit a summary of the proposed relocations for each designated unit.
- Individuals working with relocated gopher tortoises under a Scientific Collecting permit will be required to submit progress reports to FWC over the course of the project. Upon completion of the research project, a final report must be submitted to FWC along with any publications resulting from the permitted research.
- Gopher tortoises cannot be relocated to a research recipient site until both a Scientific Collecting permit and a Research Recipient Site permit have been issued by FWC.

Process of Issuance of a Research Recipient Site Permit

Generally, the initiation of a research project begins with the submission of a Scientific Collecting permit application to the Protected Species Permit Coordinator. Because of the

additional coordination required to issue a concurrent Scientific Collecting permit and Research Recipient Site permit, the applicant for the Scientific Collecting permit may be advised to submit a waiver of the statutory application processing time requirements as part of a request for additional information (RAI).

- The owner of the potential research recipient site submits an application to the Gopher Tortoise Permitting Coordinator's office.
- FWC staff will ensure that the applications for both permit types meet all regulatory requirements and Plan research goals during the review period.
- If the Research Recipient Site permit is issued, the regional Gopher Tortoise Conservation Biologist will enter the site information into the online permitting system.

Issuance of a Research Recipient Site permit (or associated Scientific Collecting permit) does not imply that FWC will be providing any funds to support gopher tortoise research conducted at that site.

Mitigation Contributions for Relocations to Research Recipient Sites

The FWC recognizes the conservation value of new scientific findings regarding the management and relocation of gopher tortoises. The value of the research may be considered in determining the mitigation contributions for displaced tortoises relocated to a gopher tortoise research recipient site. The mitigation contributions associated with these sites may follow the mitigation structures of recipient sites with conservation easements or other enhanced conservation value to encourage, or at least not financially hinder, relocations to research recipient sites.