

Recipient Sites: Conservation and Financial Benefits

A win-win opportunity for landowners and gopher tortoises

Presented by Katherine (Gentry) Richardson, PhD
FWC Gopher Tortoise Program Coordinator



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Thanks for joining today. My name is Kate Richardson and I'm the FWC's Gopher Tortoise Program Coordinator. If you're interested in helping us conserve gopher tortoises and making money, this is the class for you!

Course topic outline

Introduction to recipient sites

Recipient site permit options

Steps to permit issuance

Receiving relocated tortoises

Four sections to this course.



So before I jump into recipient sites, let's start off with a question to test out who knows how to work the chat feature. Who here has had the pleasure of seeing a gopher tortoise in the wild?

OK, that's great!



The gopher tortoise: *A keystone species & ecosystem engineer*

Photo credits: FWC

For those of you that have seen a gopher tortoise, you may have noticed a nearby burrow as well, such as the one in the top left corner. Gopher tortoises dig these burrows for protection from extremes in climate, fire, and predators. They may also lay eggs in the burrow apron (point out and define in pic). Because of these burrows, the gopher tortoise plays a keystone role in our southeastern ecosystem. In fact, over 360 other species, like the Indigo snake I'm releasing in the picture, use the burrows that gopher tortoises dig for shelter and protection. We also consider the gopher tortoise an ecosystem engineer because their burrows provide and maintain microhabitats that otherwise would not exist.



You used to be able to find gopher tortoises and their burrows relatively easily throughout upland habitat in Florida, especially in high dry sandy soils. Unfortunately, development and over-harvesting greatly reduced the number of these long-lived and slow to reproduce animals, which is why the gopher tortoise and its burrow is protected by state and/or federal law across its range. As you can see in the map, the gopher tortoise is a state threatened species in Florida, where it has its own Gopher Tortoise Management Plan and Gopher Tortoise Permitting Guidelines. The guidelines include specific requirements and recommendations for various elements of the gopher tortoise permitting, and I'll be referencing these guidelines throughout this course.

Responsible and humane relocation - deliberately moving wild gopher tortoises from planned development sites into protected, managed, suitable habitat to improve chances of future survival and long-term population viability



In response to their decline, the FWC began authorizing gopher tortoise relocation from planned development sites to permitted recipient sites. Fortunately, gopher tortoises are a relatively resilient species, in that they can respond well to responsible relocation. *Define responsible relocation on slide*. So far, almost 70,000 tortoises have been permitted under the current permitting system, and development shows no sign of slowing down.



What is a recipient site permit?

- An authorization from the FWC for the permittee to receive a specific number of relocated gopher tortoises on suitable upland habitat.

So what exactly is a recipient site permit? *read slide* The number of tortoises authorized for release depends on the habitat quality, number of tortoises already present on site, and the type of recipient site permit issued. For all calculations involving stocking rate of tortoises for a recipient site, only subadult and adult tortoises (which are greater than or equal to 130 mm (5 inches) in upper shell (carapace) length) are considered. Eggs, hatchlings (<61 mm) and juvenile tortoises (< 130 mm) are not considered in these calculations because of their low survivorship and minimal effect on the recipient site forage base.

Permittable upland habitat

- Regular vegetation management, preferably via prescribed burn
- Open tree canopy with ample herbaceous groundcover
- Limited acres of improved pasture
- Well-drained soils classified as having no frequency of ponding and a sufficiently deep water table
- Relatively few resident tortoises



We consider upland habitat for permitting when there is....

Resident tortoises are the tortoises that already occur on the site prior to relocation.



Conservation incentives for establishing a recipient site

- Prevent loss of tortoises
- Retain local populations
- Reduce unauthorized releases
- Preserve habitat
- Restock depleted populations
- Promote genetic diversity
- Facilitate research

Recipient sites offer a variety of conservation benefits to gopher tortoises and are intended to restore and maintain secure, viable populations throughout the species' range in Florida.



Good news: Recipient sites are compatible with other land uses

- Hunting
- Wetland mitigation banks
- Silviculture
- Low-impact recreation
- Management for other protected species

- Recipient sites are compatible with other land uses, such as
- This picture was taken at a recipient site where the primary use is as a quail plantation
- Also, landowners don't have to use their entire property as a recipient site and can leave the rest of their property for other uses.
- Existing easements usually do not prevent a gopher tortoise recipient site from being permitted either.

How does the relocation process work?

It starts with a recipient site reservation letter.



If I have piqued your interest so far, you may be wondering how does this whole relocation process work? Well, it starts with a recipient site reservation letter. More specifically, the developer or homeowner that needs to move the tortoise off a planned development site, or “donor site”, contacts a recipient site permittee and requests a reservation letter, which the recipient site permittee can only give out if there is enough authorized capacity remaining. This is very similar to a restaurant reservation, where the interested diner calls ahead with an anticipated party size and timeframe to request a table reservation. The restaurant host cannot give out a reservation if all the tables are already reserved, nor could he or she give out more reservations than people that the restaurant serve.



Once the donor site landowner has a reservation letter, he or she can apply to the FWC for a relocation permit and pay a mitigation fee for permit processing. Permit issuance is dependent on a number of factors, and an authorized agent must be associated with the relocation permit. The authorized agent is a third-party professional that is permitted by the FWC to relocate gopher tortoises. The donor site landowners hires the authorized agent to begin the relocation process. The donor site landowner must also pay the recipient site permittee to accept his or her tortoises. The recipient site permittee's agent will complete the relocation process. Recipient site permittees can charge the landowner whatever they want to receive tortoises and they may require a deposit prior to writing the reservation letter. At the moment, there is a shortage of recipient sites, so the lack of competition within the market is allowing current recipient site permittees to charge as much as \$10,000 a tortoise and people are paying it! In the past, the rate was more like 2-3 thousand a tortoise placement.

Authorized gopher tortoise agents play a key role in the relocation process



Capture at donor site



Transport



Release at recipient site

So I want to take a moment to make sure this point is clear: Authorized gopher tortoise agents are involved in not only capturing the tortoise, but also handling, transporting, surveying, and releasing the tortoise at the recipient site. We'll talk briefly about the recipient site duties of an agent later in the presentation if there's time, but the takeaway for now is that recipient site permit applicants either need to hire an agent or become one themselves in order to qualify for a recipient site permit.



Are there other up-front costs?

- Yes, cost for site prep.
- There may be additional costs depending on permit type.

But there is no longer a mitigation fee to apply for a recipient site permit!

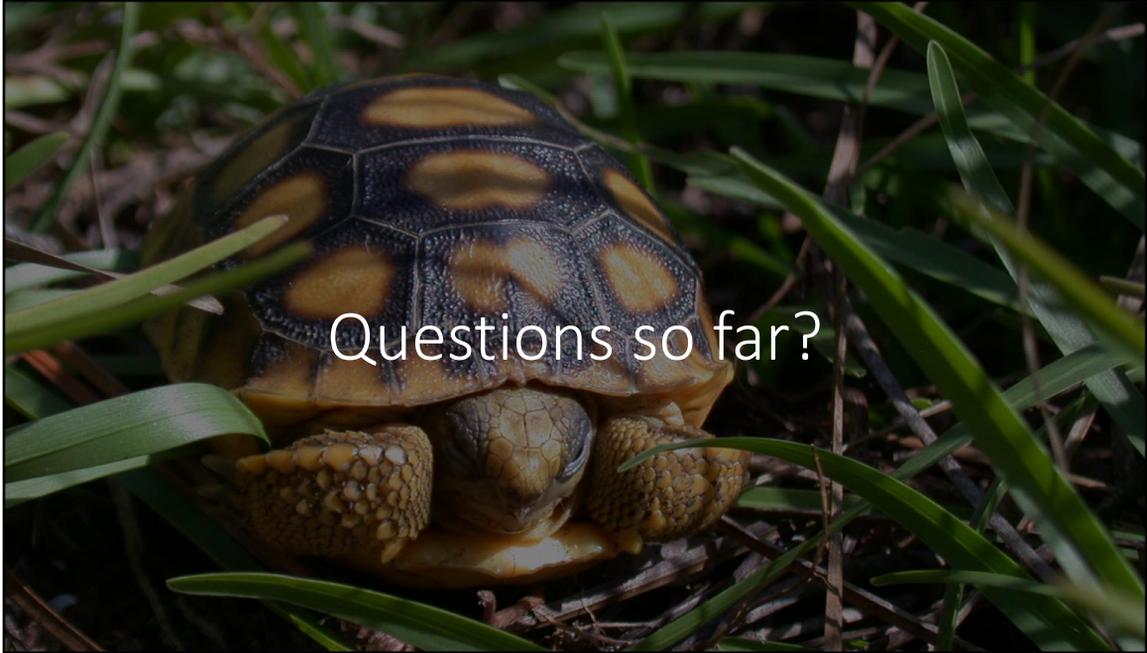
At this point, you may be thinking, “OK, if I want one of these recipient site permits, I have to hire an authorized agent to receive tortoises. Is that the only upfront cost?” It’s a good question and the answer is you may have to conduct some vegetation management too to become eligible for a permit if your habitat currently has a thick canopy and not enough herbaceous cover. Once the permit is issued, you will also have to buy and temporarily install pen materials in places within your permitted boundary where your agent will release tortoises. Depending on the type of permit, there may be additional costs but the good news is there’s no longer a mitigation fee to apply for a recipient site permit!



Summary of financial incentives

- No mitigation fee to apply.
- You set the price for receiving tortoises!
- Tens of thousands of tortoises relocated to permitted recipient sites since 2009 and demand for recipient site capacity higher than ever.

Also don't forget: You don't have to permit your entire property and there are compatible land use options for tortoises.



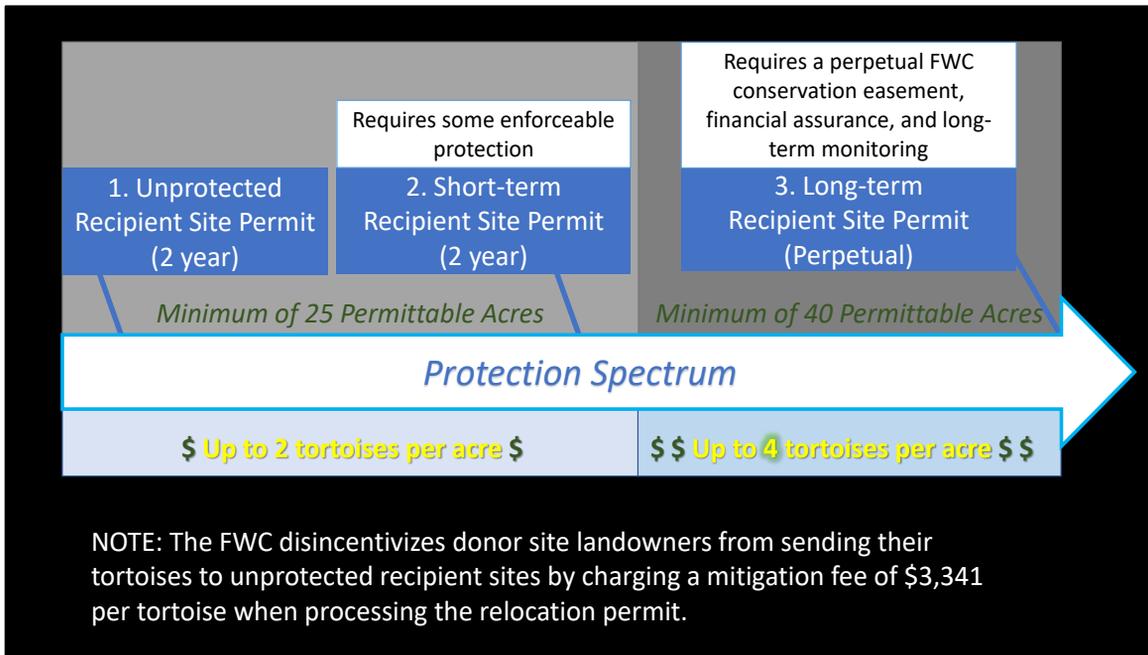
Let's pause here for questions before we jump into the type of recipient site permits available and what each requires.



Part II. Recipient Site Permit Options



There are several recipient site permit options and for the purposes of today's class, I'm going to focus on the ones that are available to private landowners. If you are a public land manager, please reach out directly to me and we can discuss additional permit options that may very well be a better fit for your site. Lastly, if you are a private or public landowner and interested in establishing a recipient site for research purposes, reach out to me separately as well because there's a totally separate recipient site permit option for that intent.



Recipient site permits fall along a spectrum of protection...

Example of some enforceable protection is a previously recorded easement with another agency that prohibits development for at least the next fifty years.

We'll talk more about the easement requirement in a minute, but note that recording an easement involves a survey, legal description, title search (not older than 180 days). The easement must reference the draft habitat management plan too.

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. The FWC will accept either a trust fund, performance bond, or irrevocable letter of credit as financial assurance. If you decide to set up a trust, it can be fully funded up front or incrementally funded. The trust must be interest bearing and the interest from the trust can be used for habitat management and monitoring so that the landowner or possibly the landowner's children in the future will not have to spend money out of pocket to manage habitat.

For long term recipient sites that are authorized to receive more than 25 tortoises, the population monitoring timeframe is 25 years; vegetation monitoring timeframe is 15-20 years depending on the survey method you implement.

I realize the requirements for a long-term recipient site permit are hefty. To incentivize you all to apply for this permit type, we cap stocking rate at 4 tortoises under this permit type instead of 2 tortoises like we do for the other recipient site permit options. Again, more tortoises mean more money.

Note:

For all permit types,
the 2-4 tortoises/acre
includes resident
tortoises!



It's important to remember though that when we're talking about stocking at up to 2-4 tortoises at a site, the stocking rate includes the resident tortoises that are already present prior to relocation. So if you're already at 2-4 tortoises per acre, it doesn't make sense to apply for a recipient site permit.

For those interested in a long-term recipient site permit:

You must meet 4 stocking bonus criteria to get “up to 4 tortoises/acre”.

Criteria	Requirement	Per acre tortoise bonus
Enhanced conservation value	Adjacent to protected land, or in Strategic Habitat Conservation Area, or > 75% native upland community	+ 0.5
Habitat	Average of > 50% herbaceous cover; < 40% average canopy cover; and no improved pasture.	+ 0.5
Soils	A midpoint of the upper limit of the water table (DWT) of 130 centimeters (51.6 inches) or greater.	+ 0.5
Size	> 250 acres of contiguous suitable upland habitat	+ 0.5

Note that acreage classified as improved pasture is not eligible for stocking bonuses for long-term protected recipient sites. Additionally, stocking densities cannot exceed two per acre on soil types with a DWT of 12 inches, which are only permissible if you can demonstrate that the site has augmentation features/drainage ditches.

About the FWC conservation easement...

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 above, on, or below 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.....
- i) Alteration of the Property except in compliance with the Plan.

If you're considering the short-term recipient site permit but would need to record a 50 year FWC easement to demonstrate some enforceable protection, or if you are interested in the long-term recipient site permit that involves recording a perpetual FWC easement, it's in your best interest to read our draft conservation easement template. As far as conservation easement templates go, it is pretty typical and includes prohibited uses you should consider, such as....

There is also no subdivision of the Property except as may otherwise be provided in this Conservation Easement.

For long term recipient site permits I do want to mention too that if a conservation easement previously granted 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.



More good news!

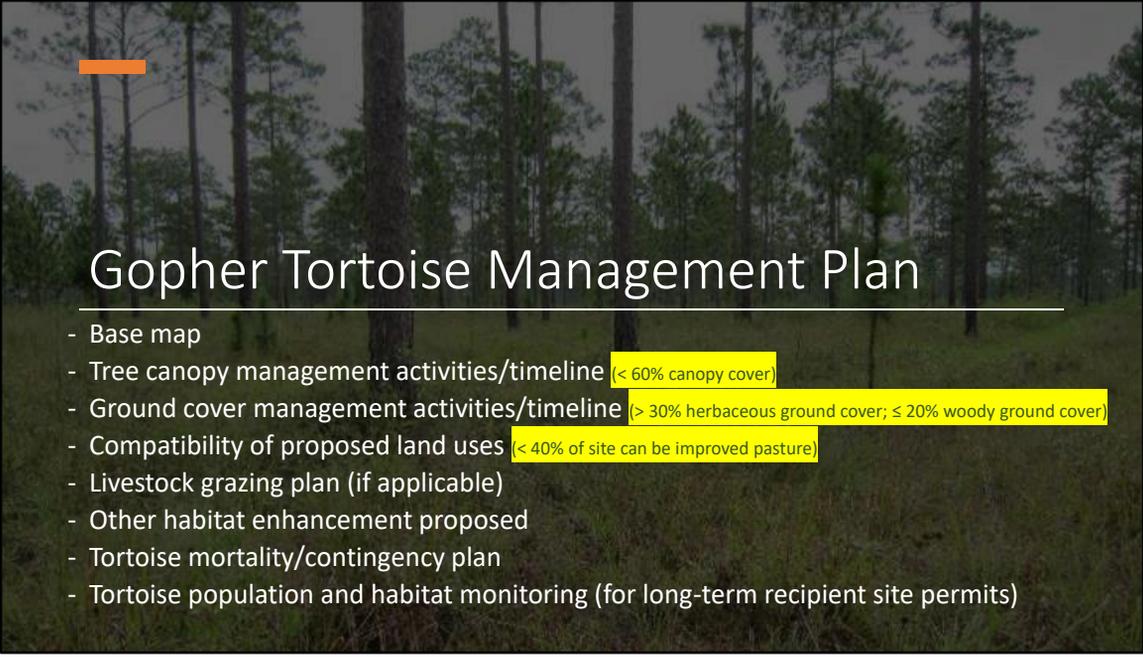
You may be able to have FWC conduct long-term monitoring on your behalf!

For those interest in long term recipient site permits there's more good news. We're currently developing a recipient site specific line transect distance sampling survey method. Once that is finalized, you can request that FWC have the method implemented in time for your monitoring report. This will give FWC better monitoring data and take the financial burden off your plate for paying an authorized agent to do you population monitoring.

Application Checklist (2020 Gopher Tortoise Permitting Guidelines)	Unprotected recipient site permit	Short-term recipient site permit	Long-term recipient site permit
Schedule pre-application consult	✓	✓	✓
Hire authorized gopher tortoise agent	✓	✓	✓
Conduct baseline population and vegetation surveys (Appendix 7)	✓	✓	✓
Write gopher tortoise management plan (Appendix 3)	✓	✓	✓
Provide soft release enclosure information (Appendix 3)	✓	✓	✓
Commit to long-term monitoring (Appendix 7)			✓
Certify trust agreement & demonstrate financial assurance (Appendix 3-1)			✓
Record FWC conservation easement (Appendix 8)		Optional	✓

Despite there being different permit options, the application checklist does have some similarities across permit options....

All of these application requirements are covered in the guidelines, which I've referenced from with specific appendices on this slide. I also included a link to our permit locator map that you can use to find an agent near you and a link to the 2020 GTPG. We will walk through the pre-app consult in-depth in the next section of this course.



Gopher Tortoise Management Plan

- Base map
- Tree canopy management activities/timeline (< 60% canopy cover)
- Ground cover management activities/timeline (> 30% herbaceous ground cover; ≤ 20% woody ground cover)
- Compatibility of proposed land uses (< 40% of site can be improved pasture)
- Livestock grazing plan (if applicable)
- Other habitat enhancement proposed
- Tortoise mortality/contingency plan
- Tortoise population and habitat monitoring (for long-term recipient site permits)

Let's take a moment to talk about the gopher tortoise management plan that's required for all permit applications.

Areas of FWC-approved, suitable gopher tortoise habitat where cattle will also be grazed must maintain adequate forage for tortoises, generally maintaining vegetation height between 4" – 12".

- o To minimize impacts caused by cattle trampling on gopher tortoise burrows and nests, the cattle grazing stocking rate cannot exceed one cow/animal unit per 6 acres within the FWC-approved, suitable gopher tortoise habitat portion of the recipient site.
- o High intensity areas (i.e., watering or feeding stations) will not be considered as providing suitable gopher tortoise habitat, and therefore not be included within the acreage used to calculate tortoise stocking densities. Following consultation with and approval by FWC, these high intensity areas may be relocated by the landowner within the recipient site if it does not result in a reduction of the total acres of FWC-approved gopher tortoise habitat, and cause impact to burrows on the permitted recipient site.
- o Activities including flash grazing, pesticide use (other than herbicide use to improve habitat), row cropping, sod production, and upland pond construction shall not be permitted within the FWC-approved, suitable gopher tortoise habitat.

Gopher Tortoise Management Plan Tips

- Manage by prescribed fire
 - But do not write yourself into a “corner” and set yourself up for noncompliance
 - Burn in a mosaic pattern; doing so provides forage/cover patches while burned area recovers
 - Plan survey dates soon after management actions to increase likelihood of burrow detection
- Commit to keeping invasive plant cover below a certain level
- Specify that any post-baseline monitoring surveys will follow the survey design approved by FWC at the time of permit-issuance, unless otherwise approved to deviate in a permit amendment
- Include a commitment to follow [Wildlife Best Management Practices](#) for burrowing animals

Here are some of the tips we share for you to consider when writing your plan.

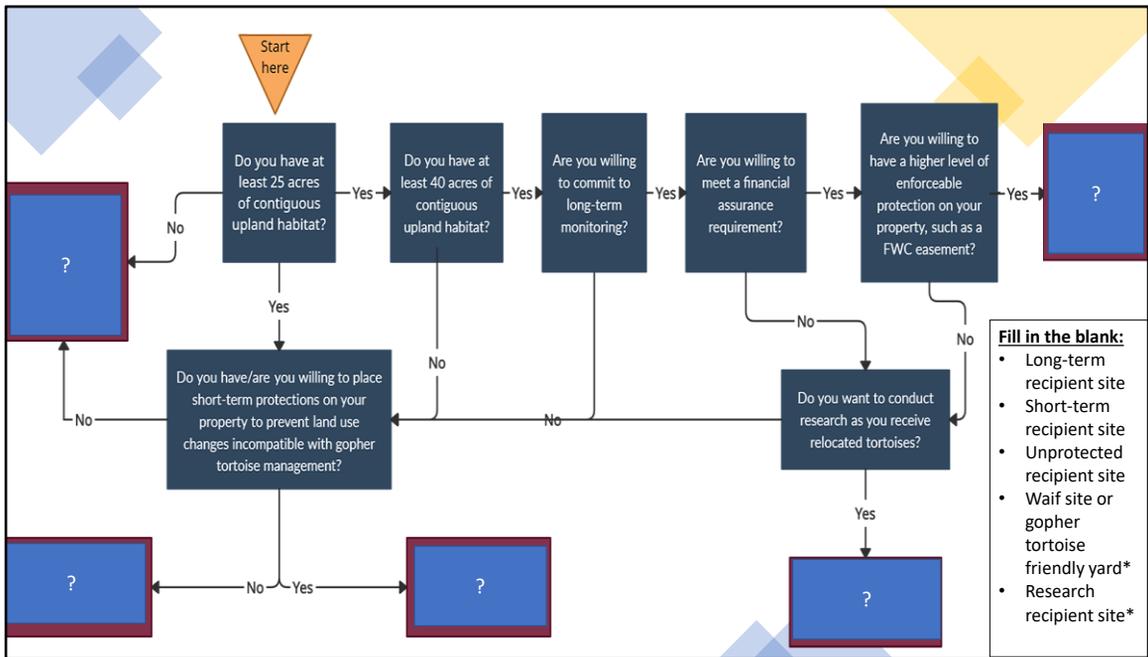
Keep in mind, management actions must be completed exactly as described during the timelines provided in the plan, and only actions listed in the plan are approved. For this reason, it’s best to include specific, time-sensitive actions, but allow for more general actions that can be completed if necessary. For example, adding the option to mechanically reduce ground and shrub cover before a prescribed fire or if a fire didn’t kill woody vegetation gives you the freedom to use mechanical equipment to make sure the site is in compliance and/or to keep the burn safe and effective.

Best Management Practices include:

- Locate heavy use or high-intensity areas such as supplemental feeding or water troughs away from known and visibly apparent active burrows.
- Locate concentrated heavy equipment operations (e.g. mix and load areas, agrichemical applicator(s) staging areas, etc.) away from known and visibly apparent active burrows, and especially known concentrations of active burrows. If concentrated heavy equipment operations must be located in such areas: a) identify and mark burrows, and b) avoid damage

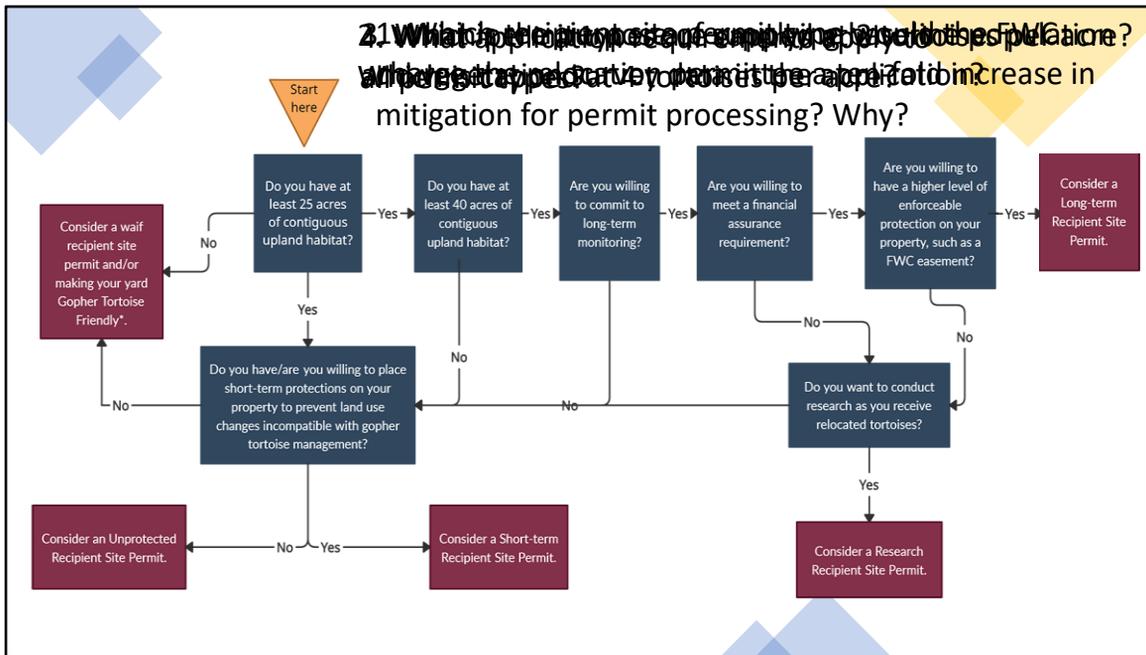
to the burrow opening and apron especially during the nesting season (May through September for gopher tortoises).

- Avoid direct contact year-round with all gopher tortoises, as well as known and visibly apparent active burrows, and burrow aprons when operating heavy equipment. This is especially important during the period between May through September for gopher tortoises.
- When practical, minimize the use of heavy equipment during September and October in areas of known or visibly apparent gopher tortoises or burrows since hatchlings are more numerous and less visible due to their size during this time.



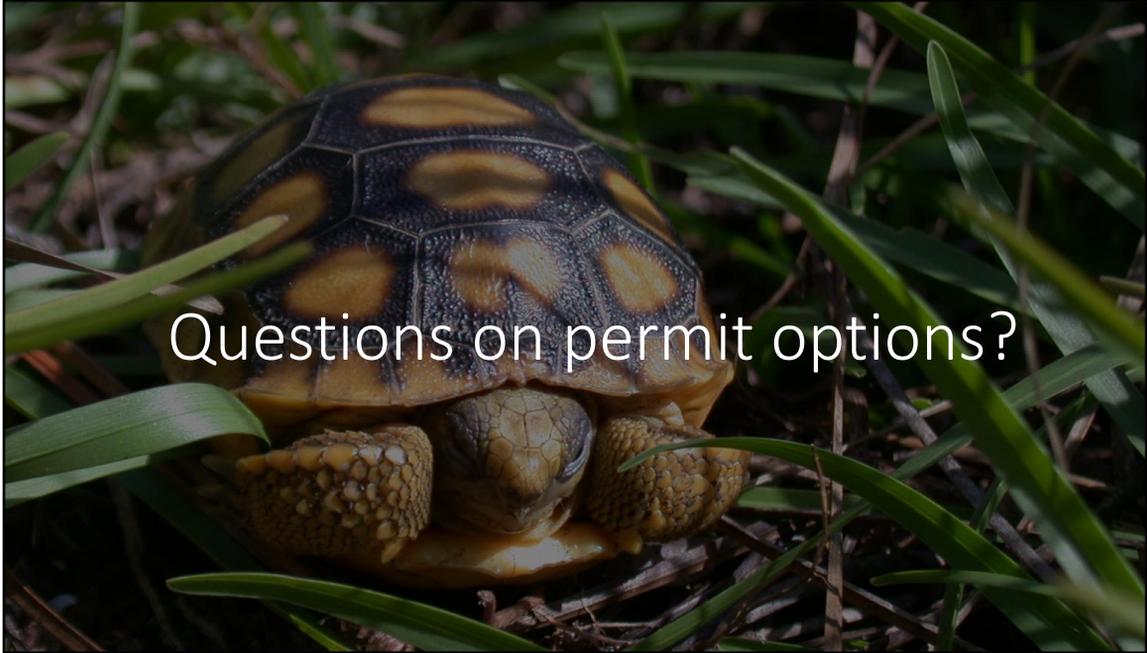
3 minutes. Quiz exercise to test your knowledge. * means we haven't talked about it yet.

Before we move on to some concept questions, I want to talk about the terms we haven't covered yet. I already mentioned that you can reach out to me if interested in setting up a research recipient site but I also want to quickly mention that the waif site is another permitting option that authorizes receipt of tortoises with unknown origin, like those dropped off in a cardboard box at a police station. There is no financial incentive for permitting a waif site but it is also a much less regulated process. Please contact Amanda Mills (Amanda.Mills@myfwc.com), our Waif Coordinator, for more information. Lastly, I'll take a moment to promote our Gopher Tortoise Friendly Yard Recognition Program. No matter the size of your property, you can take steps to protect the tortoise and its burrow and enhance habitat. Visit our Gopher Tortoise Friendly Yard webpage to learn more: <https://myfwc.com/wildlifehabitats/wildlife/gopher-tortoise/yard-recognition/>.



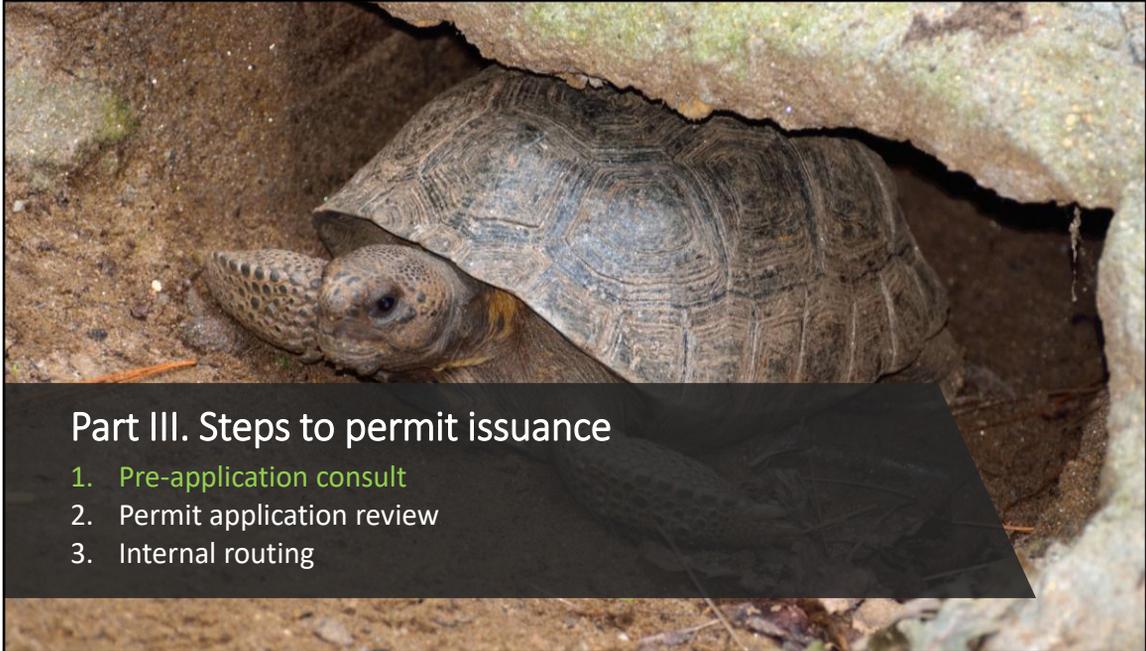
Follow up concept questions:

- Which recipient site permit type would the FWC charge the relocation permittee a ten-fold difference in mitigation for permit processing? Why?
- Which permit types are capped at 2 tortoises per acre? Which is capped at 4 tortoises per acre?
- What is the purpose of supplying baseline population and vegetation survey data in the application?
- What application requirements apply to all permit types?



Questions on permit options?

Let's pause here for questions before we jump into the steps to permit issuance.



Part III. Steps to permit issuance

1. Pre-application consult
2. Permit application review
3. Internal routing

Issuing a recipient site permit involves three main steps, starting with the pre-application process. The pre-application process is followed by the permit application review and internal routing steps. Gopher tortoise permitting biologists and land conservation staff are involved in the permit application review step, while internal routing involves passing the application materials on to the Commission's attorney and Office of Executive Director. I'm going to focus this portion of the presentation on step 1. pre-application consult, given that this step most heavily involves coordination with the applicant.

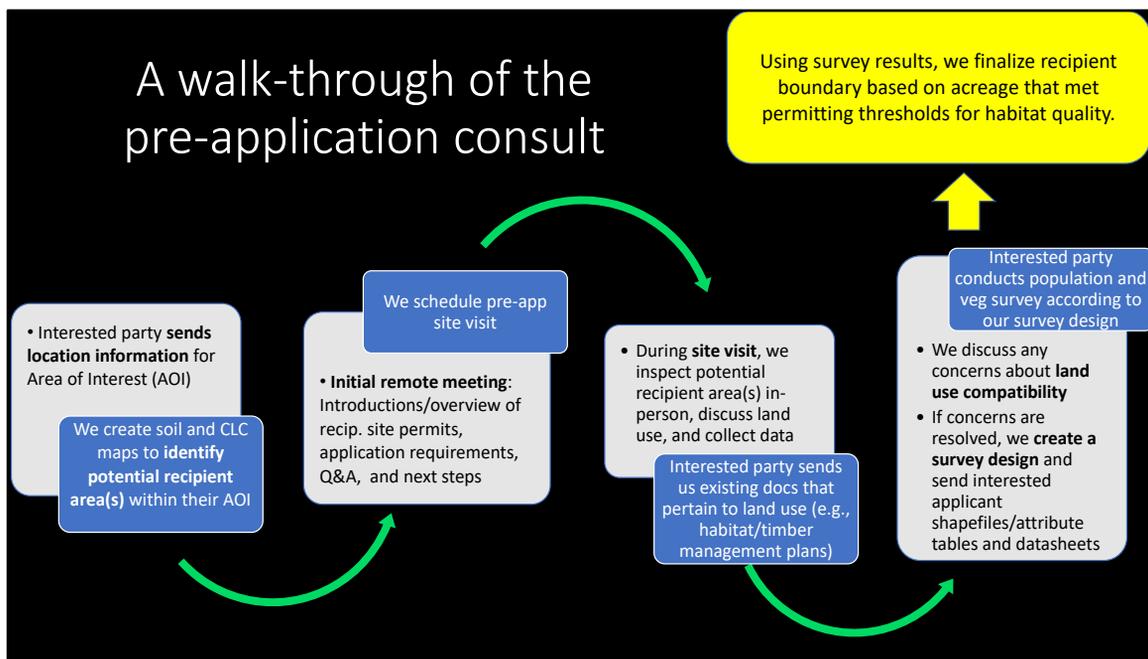
Pre-application consult

*“Landowners who meet the basic criteria in these guidelines are encouraged to ... schedule a pre-application site visit. A preliminary site visit allows FWC staff to evaluate the suitability of the habitat on proposed site. Staff may provide information on habitat management assistance or other measures that may be undertaken prior to completing an application for a FWC recipient site permit. **The pre-application site visit can help identify and address potential issues in advance, so the permit application (once submitted) can be processed more efficiently.**”*
– Gopher Tortoise Permitting Guidelines

(First introduced in June 2011 version)

The pre-application process allows us to incorporate quality control and simultaneously build stronger working relationships with landowners and authorized agents. While we’ve made developments to the preapplication consult in the last year, the concept of a pre-application site visit, which is an important part of our pre-application consult, is not new. In fact, the language about a pre-application site visit was added in 2011 and can be found on Page 31 of the 2020 version of the gopher tortoise permitting guidelines.

A walk-through of the pre-application consult



So let's take a look at a flow chart to walk through the steps of our pre-app consult, which we initiate after making contact or being contacted by those that are interested in permitting a gopher tortoise recipient site under the 2020 Gopher Tortoise Permitting Guidelines (GTPG).

First, we receive location information from the interested party indicating where within a property he or she would consider having a recipient site. We use that information to conduct a mapping exercise and edit it to identify a potential recipient area based on suitable habitat.

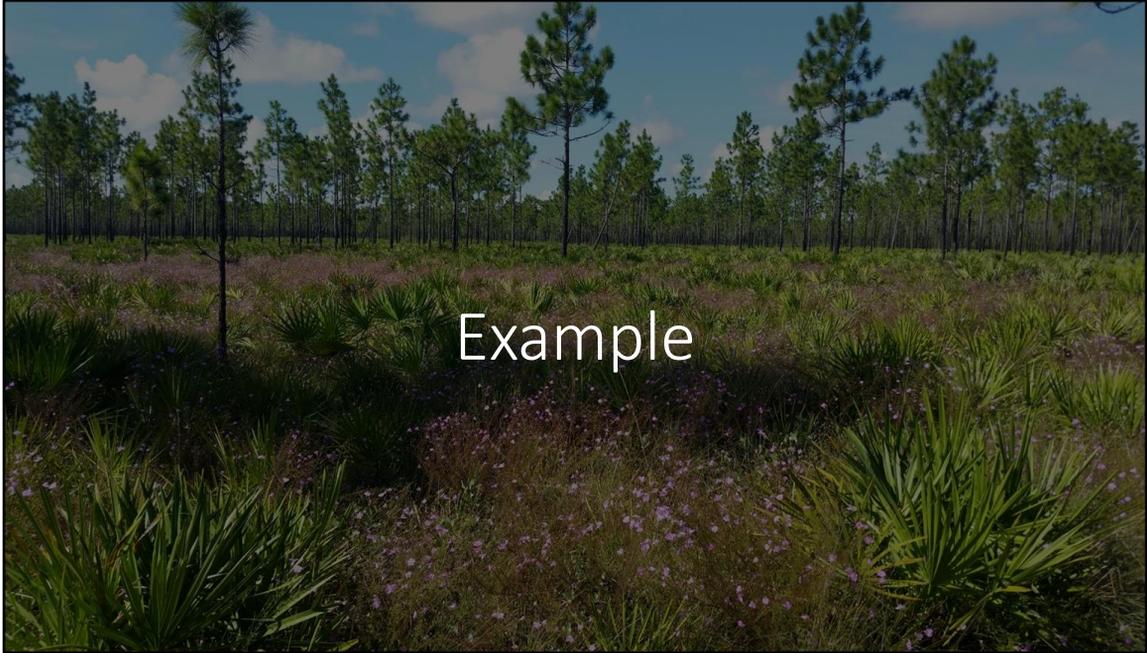
Next, we schedule a Teams or phone meeting to answer questions and provide an overview of the permitting process, similar to what we cover in this class. Afterwards, we plan a site visit to the potential recipient area.

If applicable, we also offer to look over existing documents, like implemented management plans or conservation easements, to address potential issues in advance that could cause concern if found during the permit review or routing steps.

Next, we use information gathered during the site visit to create a population and

vegetation survey design for applicants to use.

Lastly, we examine the data collected by the applicant and clip out any habitat that the vegetation survey results indicated fell-short of GTPG thresholds before giving the green light for the applicant to submit the application in the online permit system.



Let's take a minute to walk through our pre-app consult using an example so you can better visualize how it works.

Step 1. We receive location information and check size (acreage).

- Minimum acreage permitting criterion for contiguous, upland gopher tortoise habitat that meet soil and vegetation criteria
- Uplands are considered contiguous if upland communities occur within 1,000 feet of each other, and there is no physical obstacle to prevent tortoise movement among upland areas within the recipient site.



Here, we've received a shapefile that indicates the area the applicant is interested in permitting as a GT recipient site. When we receive these proposed areas, one of the first considerations is size. Again, long-term recipient sites and restocking sites must be at least 40 acres in size, whereas short-term and unprotected sites must be a minimum of 25 acres.

When I refer to size, I'm taking into consideration whether the acreage is contiguous upland habitat. The GTPG define contiguous as:

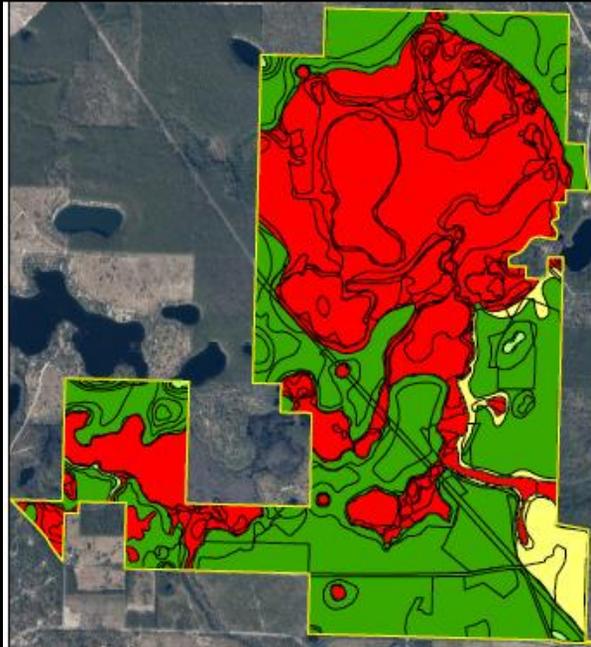
The GTPG also gives examples of physical obstacles being a paved road open to the public, railroad bed, impenetrable fence, river, or lake.

Step 2. We exclude unsuitable soil data.

Depth to Water Table (DWT)

	0-9 in (unacceptable)
	21 in (acceptable)
	54 in (desirable)
	> 80 in (desirable)
	Site boundary

Ponding frequency = None



Looking at this image, you can see we've conducted our mapping exercise to determine which soils meet the acceptable or desirable criterion of being moderately well-drained to excessively drained, with a respective midpoint of the upper limit of the water table value of 18 inches and 51.6 in (see Appendix 3, page 47 for how to find this DWT value). The soil types that didn't meet permitting thresholds are shown in red and considered unsuitable. The portion of the property with unsuitable soils would therefore be excluded from the area proposed to receive relocated tortoises (and thus not included in baseline survey design).

We also look at ponding frequency under the 2020 GTPG and do not include acreage with a ponding frequency above none. In this example, ponding frequency wasn't an issue.

Step 3. We exclude non-upland habitat and areas of non-compatible land use.

CLC Classification	
	Canal
	Coniferous Plantations
	Cypress
	Floating/Emergent Aquatic Vegetation
	Hydric Pine Flatwoods
	Improved Pasture
	Lacustrine
	Marshes
	Mixed Hardwood-Coniferous Swamps
	Mixed Hardwood-Coniferous
	Mixed Scrub-Shrub Wetland
	Mixed Wetland Hardwoods
	Non-vegetated Wetland
	Residential, Med. Density - 2-5 Dwelling Units/AC
	Rural Open
	Sandhill
	Shrub and Brushland
	Transportation
	Unimproved/Woodland Pasture
	Upland Coniferous
	Utilities
	Wet Coniferous Plantation
	Wet Prairie
	Site Boundary



Then, we look at the CLC mapping data within their boundary to identify non-upland habitat, or habitat with non-compatible land use as indicated by applicant. Here, we exclude non-upland habitat, like wetlands, marshes, and swamps and utilities.

The Cooperative Land Cover Map (CLC) is the accepted source for land use classifications. The CLC dataset can be downloaded from the FWC GIS and mapping site: <https://myfwc.com/research/gis/applications/articles/cooperative-land-cover/>. The associated Florida Land Use Classification System document used by the CLC is also accessible on this site.

Step 4. We hold our pre-app meeting to confirm permit type and then we schedule a site visit to:

- Ground truth mapping data
- Document and discuss land use concerns/pen placement/signs of mortality
- Collect field data for reference (e.g., note vegetation thickness)
- Answer questions and meet in-person to build strong working relationship with landowner and agent

Tentative
Recipient
Site



After our pre-app meeting where we confirmed the landowner was interested in a long-term recipient site permit, we schedule a site visit to inspect the area we would consider permitting as a recipient site based on mapping data. We invite Landowner Assistance Program Biologists to the site visit for their management expertise and help with ground-truthing the CLC data. It is important to accurately distinguish between land cover classes. We also use these site visits to document and discuss land use concerns and pen placement. Management recommendations from the LAP biologist can be incorporated into your Gopher Tortoise Management Plan.

Step 5. We create a 15% survey design.

- Tentatively 3 units
- Survey design sent as pdf and shapefiles with data attribute table
- We provide population and vegetation survey designs to ensure:
 - Application/baseline data is collected according to the Guidelines and informative
 - Consistent data collection for post-baseline, monitoring surveys
 - Smoother application review/better customer service



Based on the noncontiguous nature of the remaining upland habitat, we then created a survey design for three distinct recipient site units on this property. Notice the landowner decided to set aside a portion of the property so that prohibited uses in conservation easement did not apply to all acreage. At this point, we also provide a template spreadsheet for applicants to organize their vegetation data so that it is easy to check that the vegetation met the percent cover thresholds.

(Step 5 cont'd)

And we offer tips for baseline population surveying, such as:

1. Make sure your agent is authorized to burrow scope
2. Survey during the driest part of the year
3. Loan our burrow scope equipment if necessary
4. Survey after a burn
5. Stop surveying and consult a FWC gopher tortoise biologist if you notice a high number of burrows with "unknown occupancy"

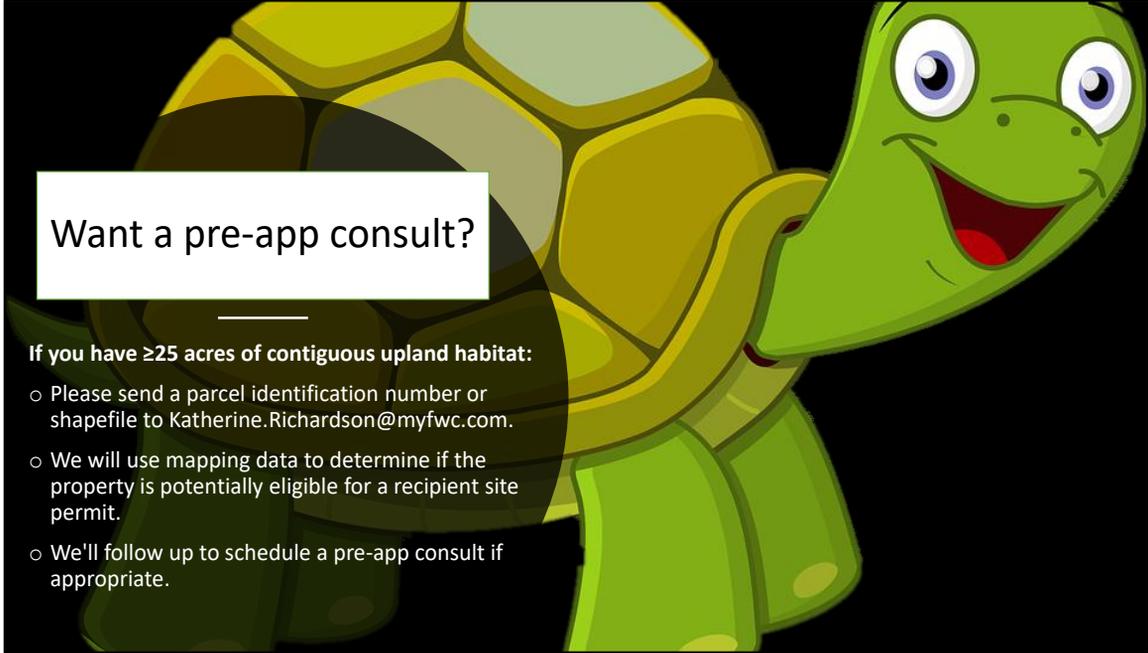


This is because scoped burrows with an unknown occupancy are counted as occupied and therefore increase the estimate of resident tortoises on site.

Why do all this in a pre-app consult?

- Facilitates quality control
- Makes it easier and less overwhelming to apply for a permit
- Streamlines permit application review



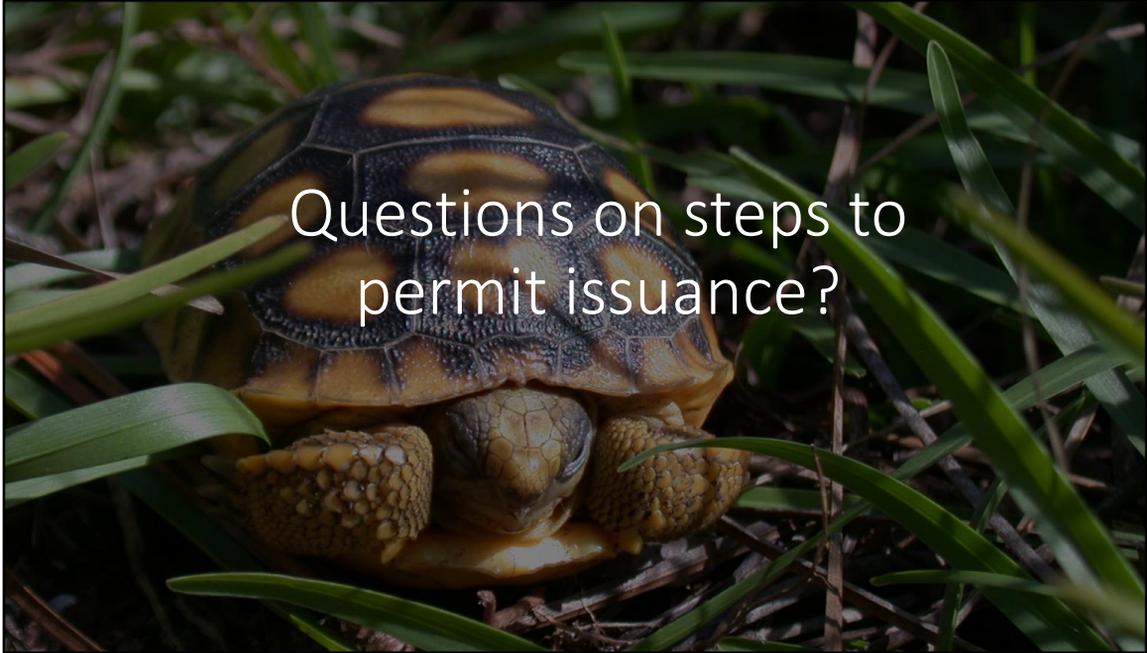


Want a pre-app consult?

If you have ≥ 25 acres of contiguous upland habitat:

- Please send a parcel identification number or shapefile to Katherine.Richardson@myfwc.com.
- We will use mapping data to determine if the property is potentially eligible for a recipient site permit.
- We'll follow up to schedule a pre-app consult if appropriate.

If you haven't already, please be sure to review our [recipient site permit webpage!](#)



Let's pause here for questions, and if there's time left after we can quickly cover release post-permit issuance.

Part IV. Receiving relocated tortoises



Before tortoises are released at the permitted recipient site:



A recipient site permit authorizes receipt of relocated tortoises following a specific protocol, which authorized agents must be qualified to follow. Steps include...As tortoises are received, careful ledgers must be kept so that the recipient site owner and agent know how many tortoise reservations they have left to give to donor site parties.

What's with the silt fence?

- Provides a temporary enclosure for a “soft release”
- Temporarily restricting tortoise movement for 6-12 months encourages site fidelity



The reason you're seeing pictures of silt fence is because tortoises have a very strong homing instinct and will try to return to the burrows they were relocated from at the development site. This can lead to them dispersing from the protected recipient site, which we want to discourage. Constructing a temporary silt fence restricts tortoise movement and is called “soft release.” While silt fencing is the most common material installed, temporary enclosures may be of any material that prevents the passage of tortoises of all sizes released to the site. That is, it 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.



Soft release tips

1. Encourage burrowing within the pen interior
2. Keep pen sizes small
3. Stock pens below the maximum approved
4. Space out pen locations
5. Minimize the timeframe during which new tortoises are released to a pen and keep tortoises from the same origin population together whenever possible
6. Install pens within the highest quality habitat

I mentioned this before, but as a reminder, you'll be proposing pen locations in your application for a permit. As you think about where you will install your pens and other logistics, consider the following soft release tips that can increase the chance of relocation success.

1. ...by deflecting movement away from the fence line or digging starter burrows away from the silt fence.
2. ...as is feasible or subdivide pens to minimize disease exposure risk.
3.allotment of 1.5 times the approved density for the area in which the enclosure is located.
4. ...to reduce the risk of stressful social interactions and concentrated dispersal after pen removal.
5. To reduce social stress...
6. ...on your property to encourage tortoises to settle in an area with enough food, shade, and cover

Note: Release is temperature dependent

- 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 [72 hours] 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.

Post-release requirements

- Temporary fencing must be regularly monitored and maintained to repair damage and ensure its integrity.
- Tortoises observed above ground within the temporary enclosures must be monitored weekly for the first month and monthly thereafter to document any problems (e.g., illness, mortality, evidence of human poaching).
- Observation of tortoise mortality must be reported to the FWC within 48 hours.
- Contact the FWC if decreases in tortoise numbers are documented.

Thanks and
questions?



Permit Type	Relocation Mitigation Fee	Minimum acreage	Eligible for stocking bonuses?	Max stocking rate per acre	Enforceable protection?	Financial assurance?	MOU?	Long-term Monitoring?
Unprotected recipient site	\$3,341 per tortoise under Conservation permit	25	No	2	No	No	No	No
Short-term recipient site	\$223 for first group of 10 burrows (up to five gopher tortoises) \$3,341 each additional tortoise	25	No	2	Some	No	No	No
Long-term recipient site	\$223 for first group of 10 burrows (up to five gopher tortoises) \$334 each additional tortoise	40	Yes	4	FWC conservation easement	Yes	No	Yes
Research recipient site	\$223 for first group of 10 burrows (up to five gopher tortoises) \$334 each additional tortoise	40	Yes	4	No	No	No	Yes

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Not all recipient sites afford relocated gopher tortoises with the same level of protection.

Research recipient sites: Receive displaced tortoises to carry out research projects and consequently be designated as research recipient sites. The criteria for research recipient sites are outlined in Appendix 13.

Permit Type	Relocation Mitigation Fee	Minimum acreage	Eligible for stocking bonuses?	Max stocking rate per acre	Enforceable protection?	Financial assurance?	MOU?	Long-term Monitoring?
Contiguous public conservation land (PCL) recipient site	\$223 for first group of 10 burrows (up to five gopher tortoises) \$334 each additional tortoise	40	Yes	2	Designated as PCL or public lands protected by a min. 50-year conservation easement (with FWC included as a grantee)	General appropriation or allocation approved by a public governing body for management, or equal to that of a long-term protected recipient site	Yes	Yes
Long-term protected restocking site <i>Note: Requires a restocking plan too and is not allowed within developed public use areas of management units, or within approved or proposed sites for facilities development (e.g., campgrounds, structures, parking lots)</i>	\$223 for first group of 10 burrows (up to five gopher tortoises) \$334 each additional tortoise	40 + adjacent depleted suitable habitat for population growth	Yes	2	Same as Contiguous PCL	Yes, but public agencies may establish a Trust Fund held by a 3rd party such as a Citizens Support Organization (CSO) or other non-profit organization. See Cost Accounting sheet.	Yes	Yes

POCKET SLIDE

Contiguous PCL: an on-site relocation permit option encourages relocation within contiguous public lands by reducing mitigation costs and streamlining the process, thereby facilitating enhanced conservation for tortoises. Under this permit option, gopher tortoises can be retained within their native population instead of being moved off-site or to an on-site short-term or unprotected recipient site. This relocation option is intended for public projects where the donor site is contiguous to public conservation lands (see Glossary) and there is no physical obstacle [e.g., paved road open to the public (i.e., greater than 2 lanes, curb and gutter or other physical barriers, or a speed limit >30mph), railroad bed, impenetrable fence, river, and lake] that would prevent tortoise movement to the recipient site or other upland areas within the relocation/restocking site. For lands where DEP is the managing agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund ("BOT") for all State-owned lands, the following is required: 1) A letter requesting the acceptance of gopher tortoises from other public lands must be received from the lead conservation land manager. 2) The land lease will be modified to include a condition recognizing a new lease would be entered into at the time of the current lease expiration, according to 18-2 Florida Administrative Code, as long as all lease terms and conditions were in compliance at the time of expiration. 3) A letter of request from

the lead conservation land manager to add the additional gopher tortoise recipient site to the current Land Management Plan through the Acquisition and Restoration Council negative response process must be received. The Land Management Plan should reference the FWCC permit. This process must be complete prior to the execution of a modified lease. 4) A MOU must be executed between the FWC and the lead land management agency to provide a specified timeframe from date of permit issuance when the above requirements will be submitted to DEP and ARC as applicable.

Restocking site permit: For public conservation lands to accept tortoises from projects where the donor site is not contiguous or the linear right-of-way project is located more than one mile from the recipient site, refer to Appendix 12 for the conservation lands restocking guidelines. Sites where tortoises are depleted or no longer exist. For purposes of the Gopher Tortoise Management Plan and Permitting Guidelines, restocking is defined as deliberately moving wild gopher tortoises into protected, managed, suitable habitat where resident densities are extremely low and where the restocked tortoises' future survival and long-term population viability are very likely. Public land agencies may utilize their own staff if they have the appropriate training and experience to conduct surveys and are Authorized Agents, or they may contract with Authorized Gopher Tortoise Agents from the private sector. Tortoises should not be stocked into a patch of habitat that is adjacent to or contiguous with a patch that has a moderate to high tortoise density. Existing land leases, covenants, and management plans may need to be amended to provide adequate assurance of management.