



# The Buzzard Bulletin

Notes & Information for CREW Trust Volunteers

December, 2021 - January, 2022

Volume 6, Issue 2

## Notepad

### Hike & Learn

Three new volunteer-only Hike & Learn programs have been scheduled. Register to attend in Track-it-Forward.

- Dec. 12: Plants of FPS
- Jan. 28: Plants of BRS
- Feb. 19: Megafauna in CMT

### Volunteer social

The CREW Trust volunteer social is Saturday, December 4, from 5-8 PM at Brian and Christine Farrar's home. Reservations are required before November 30. Make a reservation in Track-it-Forward, or contact Allison.

### No butterflies

The previously announced spring Strolling Science Seminar on butterflies has been cancelled.

### Turtle & Hare hike

Saturday, January 22, will be a volunteers-only hike in BRS. One group (turtles) will go at a slower, hands-on pace while the other group (hares) will hike to the trestle bridge and back.

### Bridge out

The SFWMD closed the BRS trestle bridge to hikers and bikers because of its unsafe condition.

Consequently, the upcoming Hike-the-Loop and Bike-the-Loop programs for visitors will go to the trestle bridge and then turn and come back. That still gives hikers and bikers about a nine mile trek.

## Make a garden happy

# Simple garden project requires little time

The garden at the Cypress Dome Trails parking lot has gone through a lot since its creation as an Eagle Scout project.

It has been completely updated three times, most recently by FGCU students who did a really great job this year of replanting, weeding, and mulching.



All it really needs now is a little seasonal up-keep – weeding, mulching using pine needles from the trail, and occasional plant trimming.

If a few volunteers could adopt this project, maintaining it a few times a year, the garden would be so much happier.

## Learn how to become a CREW Trust rock star

The Soil ROCKS! educational programs begin in January and volunteer help would be greatly appreciated.

The teacher training is on Saturday, January 15, from 9 AM to noon.

Volunteers who are able to assist with Soil ROCKS! are asked to attend the morning training to learn the material and meet some of the teachers who will be leading the classes.

## New program planned to improve trail conditions

Plans are underway to create a new volunteer program to improve trail maintenance and communication. Volunteer leaders will become CREW's

eyes on the trails at each trail system, reporting needed maintenance and scheduling work days. Contact Allison for more information.

## Creature feature...

### Meet the tiny Thread-waisted Wasp (*Sphex lucae*)

A very tiny waist (yellow arrow) connects the female's head and thorax to its red abdomen. The male's abdomen is black; its waist is just as small.

The waist is only as wide as a thread or single hair, but that somehow works for the wasp.

Females use their legs which are covered with spiked hairs to pull loose soil or sand up as they dig burrows into the ground. This burrow becomes a nest for fertilized eggs.

The wasp was first discovered during a wildlife survey in Flint Pen Strand in October of this year.



# Natural succession will turn open CREW lands into mature forests

Natural plant succession is the predictable, gradual, and sequential change in plant communities over a period of time.

An area of bare soil, if left undisturbed, will naturally advance from: (1) annual grasses and broadleaf plants (forbs); to (2) perennial grasses and more forbs; then to (3) shrubs and vines; followed by (4) young forest tree species; and finally (5) a mature climax forest.

This natural revegetation relies upon the establishment of plants growing from three primary sources:

- 1) those already present on the site,
- 2) plants lying dormant in the soil as seeds or roots, and
- 3) seeds from nearby plants carried by the wind, water or wildlife.

To pause succession and maintain an earlier stage, some type of maintenance regime is required.

Years ago, wildlife ecologist Aldo Leopold cited four tools to control or



alter natural plant succession: “Cow, plow, fire and axe.”

Those are still true today although in most situations the cow has been replaced by a mower or shredder and the axe has been replaced by a chain saw.

By utilizing one or more of these four tools, the progression of plant succession can be stopped and altered.

The different stages of succession are easily observable along the yellow and red trails in FPS where the melaleuca forest has been eliminated and native plants are reclaiming the land.

The above photo shows succession in an open area along the FPS red trail with young pines, shrubs, and palmettos establishing themselves.

Left alone, natural succession occurs at its own pace. The process of forest succession is best described in the following five stages.

**1 PIONEER PLANTS** first populate disturbed soil. These plants are annuals that spread by producing a large amount of seeds that are carried by the wind, allowing them to be carried far and wide.

They have special adaptations that make them ideal for their pioneering function. They can grow in hot, dry and exposed conditions, and in very poor soil. Special adaptations such as deep tap roots break up compacted soil, extensive networks of fibrous roots hold loose soil together, and roots with nodes which contain

nitrogen fixing bacteria add nitrogen to the soil. They may use thorns or substances toxic to herbivores to protect themselves from being eaten.

These plants are short lived and die down, creating a leaf litter mulch which breaks down and starts the process of soil building.

**2 PERENNIAL PLANTS & GRASSES:** This creates an environment which can support perennial plants and grasses,

which then start inhabiting this space. Shade intolerant shrub and tree seedlings also begin growing there.

**3 PIONEER SHRUBS:** Once these changes have taken place, the space becomes suitable for the growth of woody pioneer shrubs. The transformation into a shrub land elevates the height of the vegetation and creates a protective microclimate which supports the growth of small trees.

**4 PIONEER TREES:** Small, fast growing but short-lived pioneer trees form a thicket which then transforms the area into a young forest.

**5 CLIMAX TREES:** Pioneer trees are gradually replaced by taller and longer living hardwoods trees – the climax trees. An understory of shade tolerant species grows below them, creating a mature forest.

Once this system is established, it doesn't remain static. Nothing in nature does. It is a living, dynamic system. As plants naturally die down, they are replaced by others.

If a big space results from the loss of a large tree, for example, a small succession cycle can occur in just that newly created open space.

Any disturbance that occurs at any point in the process, whether natural or man-made, pushes the process of forest succession back a step in the localized area. Succession then resumes forward from that point.

## Staying connected

### People

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### Web sites

[www.crewtrust.org](http://www.crewtrust.org)

[www.trackitforward.com](http://www.trackitforward.com) (hours)

[www.crewtrust.org/crew-trust-volunteers](http://www.crewtrust.org/crew-trust-volunteers) (volunteer library—the password is **crew17**)

The Buzzard Bulletin contains notes and information for CREW volunteers and is emailed six times a year (September, November, January, March, May, July). Dick Brewer, editor.