



**ARTHROPOD CONTROL
PLANS**
Northeast District

January 28, 1991

Mr. Thomas Michael Shores
Amelia Island Mosquito Control District
P. O. Box 62
Fernandina, Florida 32034

Dear Mr. Shores:

Thank you for the application to update your Arthropod Management Plan for Amelia Island Recreation Area. It appears to be similar to our existing arrangement, and we have approved it with the following caveats. As in our past agreements, all adulticiding is at the request of the Park manager unless a medical emergency has been declared by the State Epidemiologist. Additionally, any mosquito ditch restoration must be approved by the Park Manager on a case by case basis because of the significant disruption which may occur to the Park, endangered or threatened species, or other species assemblages.

As in the past, we would also appreciate your limiting even approved control activities to only those needed to solve a documented problem.

Again, we appreciate your assistance. If you have any questions or concerns, please let me know.

Sincerely,

Edwin W. Irby, Jr.
Chief, Office of Fisheries
Management & Assistance Services

EWI/eaj

cc: John Mulrennan
Robert Joseph

*11/05: DCB can't find new proposal
for Amelia Island SAN to which
this approval applies. May refer
to older "objection" (attached).*

OBJECTION

State Parks

Unit(s)

District

Fort Clinch S.P.
Amelia Island S.R.A

Amelia Island

FT CLINCH - see 1995 objection
AMELIA - see 1991 letter

The activities listed below, if checked, are proposed in the plan submitted for arthropod control on environmentally sensitive and biologically highly productive lands. They are unacceptable for subject properties.

Unacceptable Activities

- Aerial adulticiding, including incidental deposition.
- Application of larvicides or pupacides except for Bacillus thuringiensis israelensis (BTI).
- Any physical alterations such as, but not limited to: ditches, ponds, dikes, impoundments, or the maintenance of such alterations.
- Trimming or removal of vegetation.
- Insufficient surveillance prior to proposed activity.
- Described activity so general we cannot tell how parcel would be affected.
- No plan received.

The activities listed below would be acceptable:

- Use of Bacillus thuringiensis israelensis (BTI).
- Upon request of park manager, ground adulticiding in occupied public use and service areas.
- Placement of larvae eating native fishes such as Gambusia.

OBJECTION

State Parks

<u>Unit(s)</u>	<u>District</u>
Little Talbot Island S.P. Big Talbot Island S.P. Kingley Plantation S.H.S.	City of Jacksonville

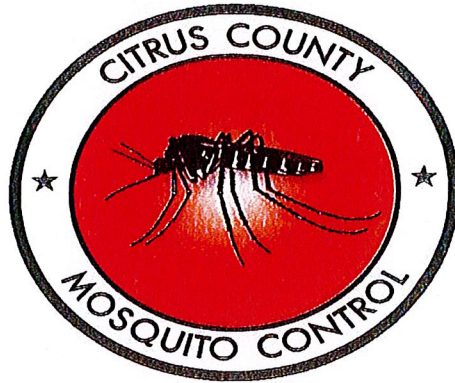
The activities listed below, if checked, are proposed in the plan submitted for arthropod control on environmentally sensitive and biologically highly productive lands. They are unacceptable for subject properties.

Unacceptable Activities

- Aerial adulticiding, including incidental deposition.
- Application of larvicides or pupacides except for Bacillus thuringiensis israelensis (BTI).
- Any physical alterations such as, but not limited to: ditches, ponds, dikes, impoundments, or the maintenance of such alterations.
- Trimming or removal of vegetation.
- Insufficient surveillance prior to proposed activity.
- Described activity so general we cannot tell how parcel would be affected.
- No plan received.

The activities listed below would be acceptable:

- Use of Bacillus thuringiensis israelensis (BTI).
- Upon request of park manager, ground adulticiding in occupied public use and service areas.
- Placement of larvae eating native fishes such as Gambusia.



ARTHROPOD MANAGEMENT PLANS
FOR
STATE LANDS MANAGED
BY THE
FLORIDA PARKS SERVICE

CITRUS COUNTY MOSQUITO CONTROL DISTRICT

968 North Lecanto Highway

Lecanto, Florida 34461

phone: 352-527-7478

www.citrusmosquito.org

December 2010



CHARLES H. BRONSON
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.
Telephone: (850) 922-7011

For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.

Name of Designated Land:

Crystal River Preserve State Park, 3266 N. Sailboat Ave., Crystal River, Citrus County Florida 34428
Crystal River Archeological State Park, 3400 N. Museum Pt., Crystal River, Citrus County Florida 34428

Is Control Work Necessary:

Yes No

Location:

Isolated pockets of water, low areas and ditches in and around the Preserve and Archeological sites

Land Management Agency:

Florida Park Service (FPS)

Are Arthropod Surveillance Activities Necessary?

Yes No

If "Yes", please explain:

Inspection of low areas, grassy swales, ditches and other water holding sites having the potential to support mosquito larvae. Landing rate counts of adult mosquitoes will be used to determine areas with the greatest problem. Occasionally CDC Traps {explained below} may be utilized to determine mosquito population density and species.

Which Surveillance Techniques Are Proposed?

Please Check All That Apply:

Landing Rate Counts Light Traps Sentinel Chickens
 Citizen Complaints Larval Dips Other

If "Other", please explain:

Center for Disease Control Traps {CDC Traps} may be used to document population densities and species. CDC Traps are baited with a miniature light bulb that attracts certain species of mosquitoes and also are baited with CO₂ which broadens the spectrum of mosquito species sampled.

Arthropod Species for Which Control is Proposed:

Anopheles crucians, An. Quadrimaculatus, Culex nigripalpus, C. erraticus, Mansonia titillans, Mansonia dyari, Coquillettidia perturbans, Culiseta melanura.

Proposed Larval Control:

Water holding sites determined to be breeding mosquito larvae will be treated using one or a combination of the larvicidal products listed below.

Proposed Larval Monitoring Procedure:

Potential mosquito breeding sites will be checked visually and/or with a 350 ml dipper used to gather larvae. If samples are not identifiable in the field, a live sample will be taken and delivered to the surveillance coordinator for identification.

Are post treatment counts being obtained:

Yes No

Biological Control of Larvae:

Might predacious fish be stocked:

Yes No

Other biological controls that might be used:

none

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

Bti

Bs

Methoprene

Non-Petroleum Surface Film

Other, please specify:

Please specify the following for each larvicide:

Chemical or Common name: Bti and Bs are sold under the brand names Vectobac and Vectolex respectively. These products are applied to a ground corn cob medium to aid in application.

Ground

Aerial

Rate of application: Vectobac and Vectolex are both applied at a rate of ten pounds per acre.

Method of application: All-terrain vehicles, trucks, powered back-pack applicators and manual broadcasting tools equipped with liquid and/or dry material spray system platforms. Rotary aircraft will only be used with prior approval of Park Manager.

Proposed Adult Mosquito Control: Ground adulticiding will occur only at the request of the park manager and then only in public use or residential areas in the park.

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide:

Chemical or common name: Biomist 30-30, Permanone 30-30, Duet,

Anvil 10-10, Zenivex E-20

Rate of application: Biomist and Permanone 0.36 fl.oz. {same product, different manufacturer}, Duet 0.75 fl.oz., Anvil 0.42 fl. oz., Zenivex 0.27 fl.oz.

Method of application: All-terrain vehicles, trucks, handheld and back-pack ultra low volume {u.l.v.} spray platforms will be utilized.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

Notification will be made by phone, fax and/or e mail. FPS will be sent a final report each year of any treatment / application for the control of mosquitoes. Details will include but are not limited to: date of application,, surveillance data necessitating treatment protocol, materiel used {to include rate of application, target area, and size of target requiring treatment. No activities will result in a report of "noactivity" for the year.

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location: Citrus County Mosquito Control District, 968 North Lecanto Highway, Lecanto, Florida 34461

How long are records maintained:
records maintained according to guidelines set forth in Florida Statute 119.01 General State Policy on Public Records {which is 3 years}.

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?
None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:
None


Include proposed operational schedules for water fluctuations:
None

List any periodic restrictions, as applicable, for example peak fish spawning times.
Occasional restriction initiated by District coincides with any hunting season allowed at this location.

Proposed Modification of Aquatic Vegetation:
None

Land Manager Comments:

Arthropod Control Agency Comments:



Signature of Lands Manager or Representative Date 12/10/10



Signature of Mosquito Control Director / Manager Date 12-07-2010



CHARLES H. BRONSON
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.
Telephone: (850) 922-7011

For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.

Name of Designated Land:

Fort Cooper State Park/3100 S. Old Floral City Road, Inverness, Citrus County Florida 34450

Is Control Work Necessary:

Yes No

Location:

Isolated pockets of water, low areas and ditches that are temporarily and permanently flooded

Land Management Agency:

Florida Park Service (FPS)

Are Arthropod Surveillance Activities Necessary? Yes No

If "Yes", please explain:

Inspections of low areas, grassy swales, ditches and other water holding sites having the potential to support mosquito larvae.

Landing rate

Counts will be used to determine areas with greatest adult mosquito problem. Occasionally CDC Traps (explained below) may be utilized to determine mosquito population density and species.

Which Surveillance Techniques Are Proposed?

Please Check All That Apply:

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Landing Rate Counts | <input type="checkbox"/> Light Traps | <input type="checkbox"/> Sentinel Chickens |
| <input checked="" type="checkbox"/> Citizen Complaints | <input checked="" type="checkbox"/> Larval Dips | <input checked="" type="checkbox"/> Other |

If "Other", please explain:

Center for Disease Control Traps (CDC Traps) may be used to document mosquito population densities and species. CDC Traps are baited

with a miniature light bulb that attracts certain species of adult mosquitoes. Traps are also baited with carbon dioxide which broadens the spectrum of mosquitoes sampled.

Arthropod Species for Which Control is Proposed:

Anopheles crucians, Anopheles quadrimaculatus, Culex nigrapalpus, Culex erraticus, Mansonia titillans, Mansonia dyari, Coquilletidia perturbans, Culiseta melanura.

Proposed Larval Control:

Water holding sites testing positive for mosquito larvae will be treated using one of the larvicide products listed below

Proposed larval monitoring procedure: Potential mosquito breeding sites will be checked visually and/or with a 350 mi dipper used to gather larvae. If samples are not

Identifiable in the field a live sample will be delivered to the Surveillance Coordinator for identification down to genus and specie.

Are post treatment counts being obtained: Yes No

Biological Control of Larvae:

Might predacious fish be stocked: Yes No

Other biological controls that might be used:

None

Material to be Used for Larviciding Applications:

(Please Check All That Apply:)

- Bti
- Bs
- Methoprene
- Non-Petroleum Surface Film
- Other, please specify: Spinosad

Please specify the following for each larvicide:

Chemical and common name: Bti and Bs are sold under the brand names VectoBac and Vectolex respectively. These products are

applied to a ground corn cob medium to aid in application. Spinosad is sold under the brand name Natular.

Ground Aerial

Rate of application: Bti, Bs, and Natular are applied at ten (10) pounds per acre.

Method of application: Powered back-pack applicators and/or manual broadcasting tools and helicopter granular broadcasters.

DACS-13668 07/08

Page 2 of 4

Proposed Adult Mosquito Control: Ground adulticiding will occur only at the request of the park manager and then only in public use or

Residential areas in the park.

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide:

Chemical or common name: Biomist 30/30, Permanone 30/30 (same active ingredient, different manufacturer). Duet, Anvil 10/10.

Rate of application: Biomist and Permanone 0.18 fl.oz./acre. Duet 0.62 fl.oz/acre, Anvil 0.42 fl.oz./acre

Method of application: All-terrain vehicles, trucks equipped with ultra-low volume sprayers, back pack sprayers, hand-held sprayers, ATV's and trucks will operate on paved or service roads only.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

Notification will be made by phone, fax and/or email prior to treatment.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location: Citrus County Mosquito Control District, 968 North Lecanto Highway, Lecanto, Florida 34461

How long are records maintained: Records maintained according to guidelines set forth in Florida Statute 119.01 General State Policy on Public Records (which is 3 years).

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?
None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:
None

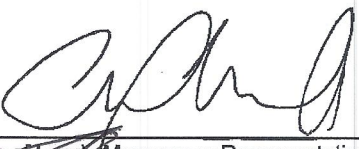
Include proposed operational schedules for water fluctuations:
None

List any periodic restrictions, as applicable, for example peak fish spawning times. Occasional restriction initiated by District
Coincides with any hunting season allowed at this location
None

Proposed Modification of Aquatic Vegetation:
None.

Land Manager Comments:

Arthropod Control Agency Comments:
None


Signature of Lands Manager or Representative 4/11/16
Date


Signature of Mosquito Control Director / Manager 4-12-16
Date



Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

September 27, 1995

Division of Recreation and Parks OBJECTION TO PROPOSED PUBLIC LANDS ARTHROPOD CONTROL PLAN

Mosquito Control District	Public Land	Parks District
Amelia Island	Ft. Clinch State Park	2

The activities listed below are included in a Proposed Arthropod Management Plan for the above public land, which is determined to be environmentally sensitive and biologically highly productive, pursuant to §388.4111, Florida Statutes. However, only those checked below are determined by the Division of Recreation and Parks to be acceptable for this land.

- * Adult surveillance (landing rate counts, light traps)
- Larval surveillance (larval dip count - 5-10 dips per site and 7-10 larvae per dip; might trigger action)
- Collection of environmental information (rainfall, tides, and meteorological data)

BIOLOGICAL CONTROL OF LARVAE:

- Stocking of indigenous predacious fishes

PESTICIDE CONTROL OF LARVAE:

- Ground - liquid; BTI
- Ground - slow-release; methoprene (Altocid)
- Ground - slow release; temephos (Abate)
- Ground - liquid; petroleum oil (Golden Bear)

PESTICIDE CONTROL OF ADULTS:

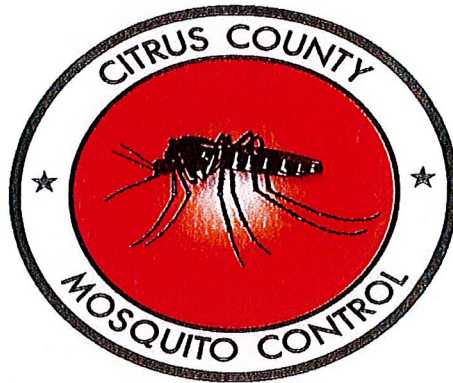
- * Ground - ULV; malathion
- * Ground - ULV; permethrin/piperonyl butoxide

WATER MANAGEMENT DITCHES

- Ditch maintenance

* Treatment is only upon request of the park manager; also, application restricted to occupied public use, residence, and service areas.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"



ARTHROPOD MANAGEMENT PLANS
FOR
STATE LANDS MANAGED
BY THE
FLORIDA PARKS SERVICE

CITRUS COUNTY MOSQUITO CONTROL DISTRICT

968 North Lecanto Highway

Lecanto, Florida 34461

phone: 352-527-7478

www.citrusmosquito.org

December 2010



CHARLES H. BRONSON
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.
Telephone: (850) 922-7011

For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.

Name of Designated Land:
Ellie Schiller - Homosassa Springs Wildlife State Park / 4150 S. Suncoast Blvd., Homosassa, Citrus County
Florida

Is Control Work Necessary: Yes No

Location:
Isolated pockets of water, low areas and ditches in and around the Park.

Land Management Agency:
Florida Park Service (FPS)

Are Arthropod Surveillance Activities Necessary? Yes No

If "Yes", please explain:
Inspection of low areas, grassy swales, ditches and other water holding sites for mosquito breeding and landing rate counts for adult mosquitoes. Occasionally CDC Traps (explained below) may be utilized to determine mosquito population densities and species.

Which Surveillance Techniques Are Proposed?
Please Check All That Apply:

- Landing Rate Counts Light Traps Sentinel Chickens
- Citizen Complaints Larval Dips Other

If "Other", please explain:
Center for Disease Control Traps {CDC Traps} may be used to document mosquito population densities and species. CDC Traps are baited with a miniature light bulb that attracts certain species of adult mosquitoes. In addition, the traps are baited with CO₂ which broadens the spectrum of mosquitoes sampled.

Arthropod Species for Which Control is Proposed:

Anopheles crucians, An. Quadrimaculatus, Culex nigripalpus, C. erraticus, Mansonia tittilans, Mansonia dyari, Coquilleidia perturbans, Culiseta melanura.

Proposed Larval Control:

Water holding sites determined to be breeding mosquito larvae will be treated using one of the larvicides listed below.

Proposed larval monitoring procedure: Potential mosquito breeding sites will be checked visually and/or with a 350 ml dipper used to gather mosquito larvae. If samples are unidentifiable in the field, a live sample will be delivered to the Surveillance Coordinator for identification.

Are post treatment counts being obtained: Yes No

Biological Control of Larvae:

Might predacious fish be stocked: Yes No

Other biological controls that might be used:

none

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

Bti

Bs

Methoprene

Non-Petroleum Surface Film

Other, please specify:

Please specify the following for each larvicide:

Chemical and common name: Bti and Bs are sold under the brand names VectoBac and Vectolex respectively. These products are applied to a ground corn cob medium to aid in application.

Ground Aerial

Rate of application: Vectobac and Vectolex are both applied at ten pounds per acre.

Method of application: powered back-pack applicators and/or manual broadcasting tools.

Proposed Adult Mosquito Control: Ground adulticiding will occur only at the request of the park manager and then only in public use or residential areas in the park.

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide:

Chemical or common name: Biomist 30-30, Permanone 30-30, Duet,

Anvil 10-10, Zenivex E-20

Rate of application: Biomist and Permanone 0.36 fl. oz. {same product different brand names}, Duet 0.75 fl. oz., Anvil 0.42 fl. oz., Zenivex E-20,

Method of application: All-terrain vehicles, trucks and aircraft equipped with ultra low volume {u.l.v.} spray platforms, powered back-pack sprayers and powered hand-held sprayers will be utilized. All equipment will be operated along paved or service roads only.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

Notification will be made by phone, fax and/or e mail. FPS will be sent a final report each year of any treatment / application for the control of mosquitoes. Details will include but are not limited to: date of application,, surveillance data necessitating treatment protocol, materiel used {to include rate of application, target area, and size of target requiring treatment. No activities will result in a report of "noactivity" for the year. Notification will be made by phone, facsimile and/or e mail

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location: Citrus County Mosquito Control District, 968 North Lecanto Highway, Lecanto, Florida 34461

How long are records maintained:
records maintained according to guidelines set forth in Florida Statute 119.01 General State Policy on Public Records {which is 3 years}.

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?
None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed?
None


Include proposed operational schedules for water fluctuations:
None

List any periodic restrictions, as applicable, for example peak fish spawning times.
Occasional restriction initiated by District coincides with any hunting season allowed at this location.


Proposed Modification of Aquatic Vegetation:
None

Land Manager Comments:

Arthropod Control Agency Comments:



Signature of Lands Manager or Representative Date



Signature of Mosquito Control Director / Manager Date

January 28, 1991

Mr. Paul R. Simmonds
Jacksonville Mosquito Control
1321 Eastport Road
Jacksonville, Florida 32218

Dear Mr. Simmonds:

Thank you for the application to update your Arthropod Management Plan for Little Talbot Island State Park. It appears to be very similar to your existing arrangement, and we have approved it (attached). As indicated in the Plan, all adulticiding is at the request of the Park manager unless a medical emergency has been declared by the State Epidemiologist.

As in the past, we would also appreciate your limiting any control activities to only those needed to solve a documented problem.

Again, we appreciate your assistance. If you have any questions or concerns, please let me know.

Sincerely,

Edwin W. Irby, Jr.
Chief, Office of Fisheries
Management & Assistance Services

EWI/eaj

cc: John Mulrennan
Dana Bryan

11/05: DEB is not sure what "attached" was, nor what "existing arrangement" means, if other than the 1987 objection (also listed below).

OBJECTION

State Parks

<u>Unit(s)</u>	<u>District</u>
Little Talbot Island S.P. Big Talbot Island S.P. Kingley Plantation S.H.S.	City of Jacksonville

The activities listed below, if checked, are proposed in the plan submitted for arthropod control on environmentally sensitive and biologically highly productive lands. They are unacceptable for subject properties.

Unacceptable Activities

- Aerial adulticiding, including incidental deposition.
- Application of larvicides or pupacides except for Bacillus thuringiensis israelensis (BTI).
- Any physical alterations such as, but not limited to: ditches, ponds, dikes, impoundments, or the maintenance of such alterations.
- Trimming or removal of vegetation.
- Insufficient surveillance prior to proposed activity.
- Described activity so general we cannot tell how parcel would be affected.
- No plan received.

The activities listed below would be acceptable:

- Use of Bacillus thuringiensis israelensis (BTI).
- Upon request of park manager, ground adulticiding in occupied public use and service areas.
- Placement of larvae eating native fishes such as Gambusia.

LEVY COUNTY MOSQUITO CONTROL

P. O. Box 248

BRONSON, FLORIDA 32621

Phone (904) 486-2345

April 14, 1987

Arthropod Control Plans for Manatee Springs Park in Levy County,
Florida. Parcel #5

The Manatee Springs State Park is located in the Northwest
area near Chiefland in Levy County, Florida. Parcel #5

Arthropod Control is not done within the boundaries of the
Park. Control in surrounding populated area's is obtained by
larviciding with Altosid Briquets and ground Adulticiding with
91% Malathion at a rate of 24 oz. per mile or 240 oz. per hour.

There are no permanent control projects located on the
State Park property.

By: *Jerry Ward*
Jerry Ward, Director

JW/fe

LEVY COUNTY MOSQUITO CONTROL

P. O. Box 248

BRONSON, FLORIDA 32621

Phone (904) 486-2345

April 14, 1987

Arthropod Control Plans for the Waccasassa Bay State Reserve in Levy County, Florida. Parcel #6

The Waccasassa Bay State Reserve is located entirely on the coastline from Yankeetown to approximately 1½ miles South-east of State Road 24 near Cedar Key.

There are no permanent control projects located within the boundaries of the Reserve.

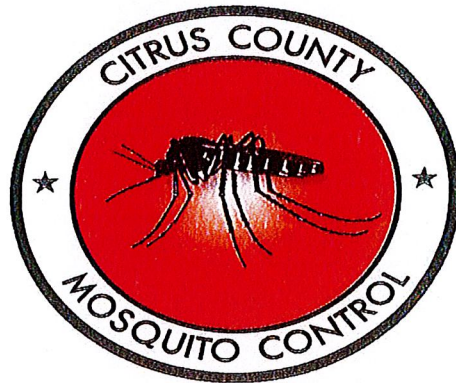
Control consists of larviciding with altosid briquets and ground adulticiding with 91% Malathion at a rate of 24 ozs. per mile or 240 ozs. per hour.

Adulticiding is done in sparsely populated areas on the Northwest side of Yankeetown and at a County Park at the end of Levy County Road 326 near the Waccasassa River.

Some control work is also carried out in surrounding areas between the County Park and the community of Gulf Hammock.

By: *Jerry Ward*
Jerry Ward, Director

JW/fe



ARTHROPOD MANAGEMENT PLANS
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ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

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Telephone: (850) 922-7011

For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.

Name of Designated Land:
Yulee Sugar Mill Ruins State Historical Site c/o: 3400 N. Museum Pt., Crystal River, Citrus County Florida 34428

Is Control Work Necessary: Yes No

Location:
Isolated pockets of water, low areas and ditches in and around the Ruins.

Land Management Agency:
Florida Park Service (FPS)

Are Arthropod Surveillance Activities Necessary? Yes No

If "Yes", please explain:
Inspections of low areas, grassy swales, ditches and other water holding sites for mosquito breeding and landing rate counts for adult mosquitoes. Occasionally CDC Traps (explained below) may be utilized to determine mosquito population density and species.

Which Surveillance Techniques Are Proposed?
Please Check All That Apply:

- Landing Rate Counts Light Traps Sentinel Chickens
- Citizen Complaints Larval Dips Other

If "Other", please explain:
Center for Disease Control Traps {CDC Traps} may be used to document mosquito population densities and species. CDC Traps are baited with a miniature light bulb that attracts certain species of mosquitoes. In addition, the traps are baited with CO₂ which broadens the spectrum of mosquitoes sampled.

Arthropod Species for Which Control is Proposed:

Anopheles crucians, An. quadrimaculatus, Culex nigripalpus, C. erraticus, Mansonia titilans, Mansonia dyari, Coquillettidia perturbans, Culiseta melanura.

Proposed Larval Control:

Water holding sites determined to be breeding mosquito larvae will be treated using one or more of the larvicides listed below.

Proposed larval monitoring procedure: Potential mosquito breeding sites will be checked visually and/or with a 350 ml dipper used to gather larvae. If samples are not identifiable in the field a live sample will be delivered to the Surveillance Coordinator for identification down to genus and specie.

Are post treatment counts being obtained: Yes No

Biological Control of Larvae:

Might predacious fish be stocked: Yes No

Other biological controls that might be used:

none

Material to be Used for Larviciding Applications:

(Please Check All That Apply:)

Bti

Bs

Methoprene

Non-Petroleum Surface Film

Other, please specify:

Please specify the following for each larvicide:

Chemical or Common name: Bti and Bs are brand names for Vectobac and Vectolex respectively. The active ingredient is applied to ground up corn cob medium to allow for easier distribution.

Ground Aerial

Rate of application: Vectobac and Vectolex are applied at ten pounds per acre.

Method of application: powered back-pack applicators and/or manual broadcasting tools.

Proposed Adult Mosquito Control: Ground adulticiding will occur only at the request of the park manager and then only in public use or residential areas in the park.

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide:

Chemical or common name: Biomist 30-30, Permanone 30-30 (same active ingredient, different manufacturer), Duet, Anvil 10-10, Zenivex E-20.

Rate of application: Biomist and Permanone 0.36 fl. oz. /acre, Duet 0.75 fl.oz. /acre, Anvil 0.42 fl. oz. /acre, Zenivex 0.27 fl. oz.

Method of application: All-terrain vehicles, trucks, powered back-pack and hand-held sprayers equipped with ultra low volume {u.l.v.} spray systems will be utilized.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

Notification will be made by phone, facsimile and/or e mail. FPS will be sent a final report each year. The report will include details about each treatment, date of application, surveillance results necessitating application, methods used, materiel used, application rates, acres treated. No activities will result in a report of "no activity" for the year.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location: Citrus County Mosquito Control District, 968 North Lecanto Highway, Lecanto, Florida 34461

How long are records maintained:

Records maintained according to guidelines set forth in Florida Statute 119.01 General State Policy on Public Records (which is 3 years).

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?
None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:
None

Include proposed operational schedules for water fluctuations:
None

List any periodic restrictions, as applicable, for example peak fish spawning times.
Occasional restriction initiated by District coincides with any hunting season allowed at this location.

Proposed Modification of Aquatic Vegetation:

None

Land Manager Comments:

Arthropod Control Agency Comments:


Signature of Lands Manager or Representative 12/10/10
Date


Signature of Mosquito Control Director / Manager 12-07-2010
Date