



Poinciana Midge Overview

August 20, 2020

John Greene – Clarke

GIVEWATERLIFE





Agenda

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1. Intro
2. Objectives
3. Midge 101
4. Integrated Pest Management – IPM
5. Questions



Introduction

Stormwater Systems

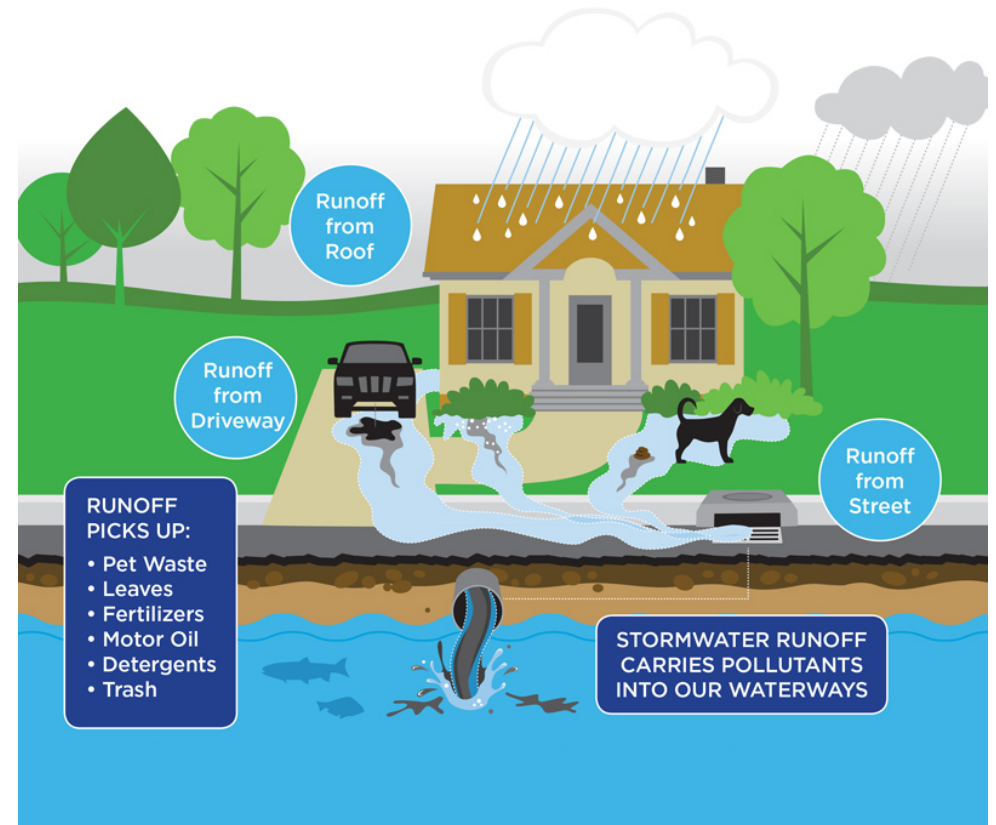
Stormwater systems are tools for managing the runoff from rainfall

Created to provide fill for building pads

Prevent flooding

Remove pollutants

Recharge aquifer



"Contaminants/nutrients, collect over time in a eutrophic/stratified environment. This is not a natural waterbody." Randy Cross NPBCID

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Clarke: Kissimmee, The Villages, Ft Myers and West Palm Beach

Local Experience:


- Certified Florida storm-water inspectors
- Licensed herbicide applicators – preserves and wetlands
- Natural areas management – preserves and wetlands
- Public health – mosquito borne disease

Observe, Inform, Options and Plan

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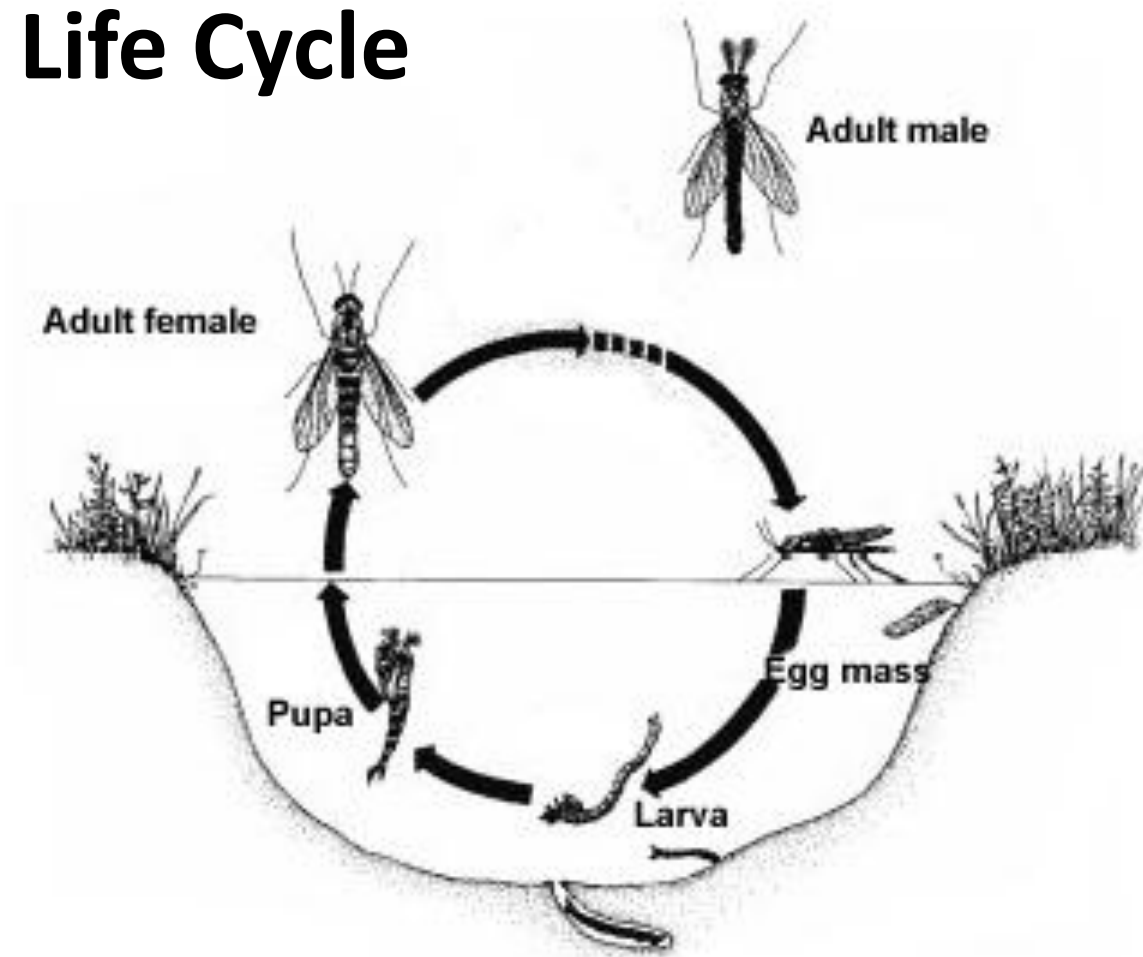


Midge 101

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- Adult midges do not bite, suck blood or carry diseases – sometimes called
“Blind Mosquitos”
 - Larval filter feeders – born without mouth parts
 - Mate and die
 - Break reproductive cycle – in ponds and on land
 - Proliferate in low dissolved oxygen and high in nutrient waters
nitrogen / phosphorus



Life Cycle



Complete Metamorphosis

- Egg: 2-7 days
- Larva: 2-7 weeks
- Pupa: 3 days
- Adult: 3-5 days

- Entire cycle 3-9 weeks
- Temperature dependent!!!

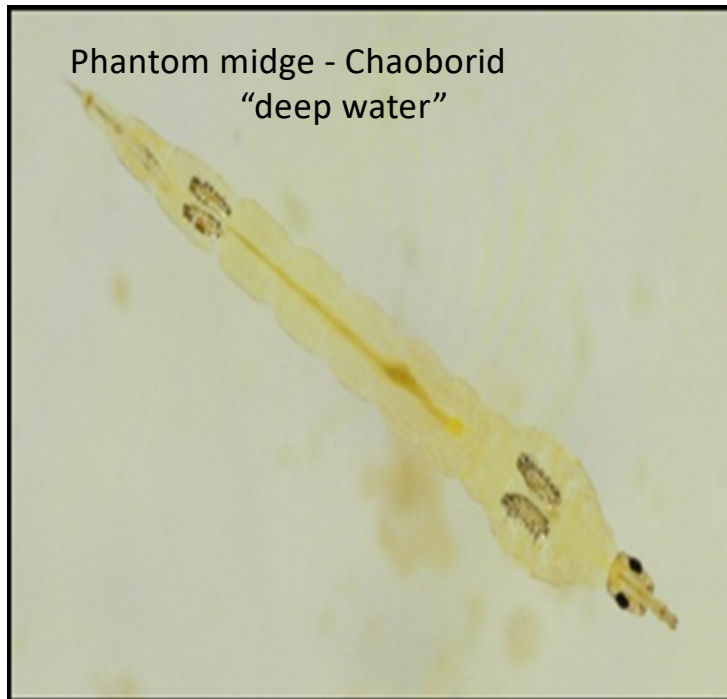
Midge Adults



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Midge Larvae





Home Owner Challenges:

- Swarming creates nuisance problems, interfering with outdoor, activities.
- Homes, screens, vegetation and lighting.
- Attract spider webs
- Soiling-staining homes - structures
- “Fishy” odor of dead adults

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Integrated Pest Management IPM



Clarke Midge IPM



Nutrient Abatement

Florida-Friendly Landscaping™ principles

Grass clipping disposal

Aeration

Littoral Planting



Biological Control: Fish Stocking

Fall: Bream (70% blue gill / 30% red ear)

Spring: Bass

Gambusia: “Mosquitofish”





Clarke Midge IPM



Chemical Treatments

Proactive Larval Control	Reactive Adulticiding
Lake Treatments	Barrier
Area-wide	ULV





Today's Takeaways

- Stormwater systems are non-natural aquatic systems
- Water quality affects midge populations
- Suppression over eradication
- Planning 1, 3, 5 years
- Combination of tools-techniques
- Break the reproductive cycle





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THANK YOU

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