

Project Wildlife



In
Learning
Design



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Project WILD/K-12 Programs Coordinator

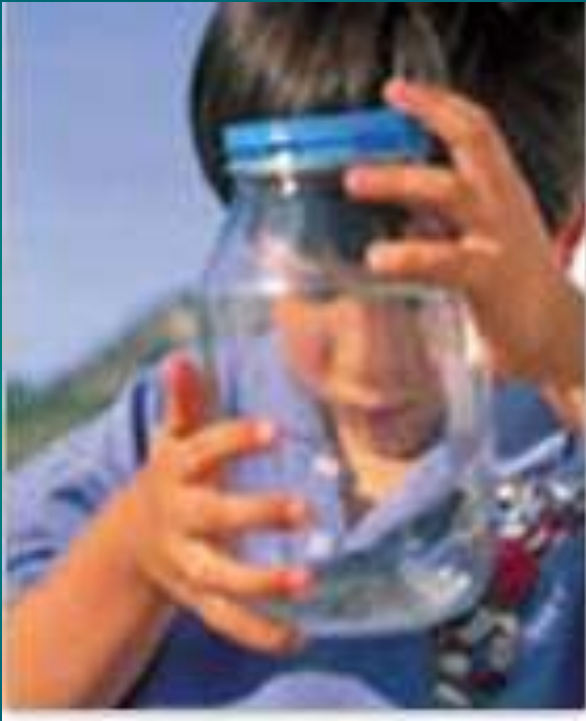
Exotic Species Coordination | Habitat and Species Conservation
Florida Fish and Wildlife Conservation Commission

Project WILD is....



- A wildlife focused conservation education program for K-12 educators and their students.
- One of the most widely-used conservation and environmental education
- An international program found in 49 states, the Canadian provinces, Czechoslovakia, India, Japan, Iceland and Sweden.

Project WILD Mission



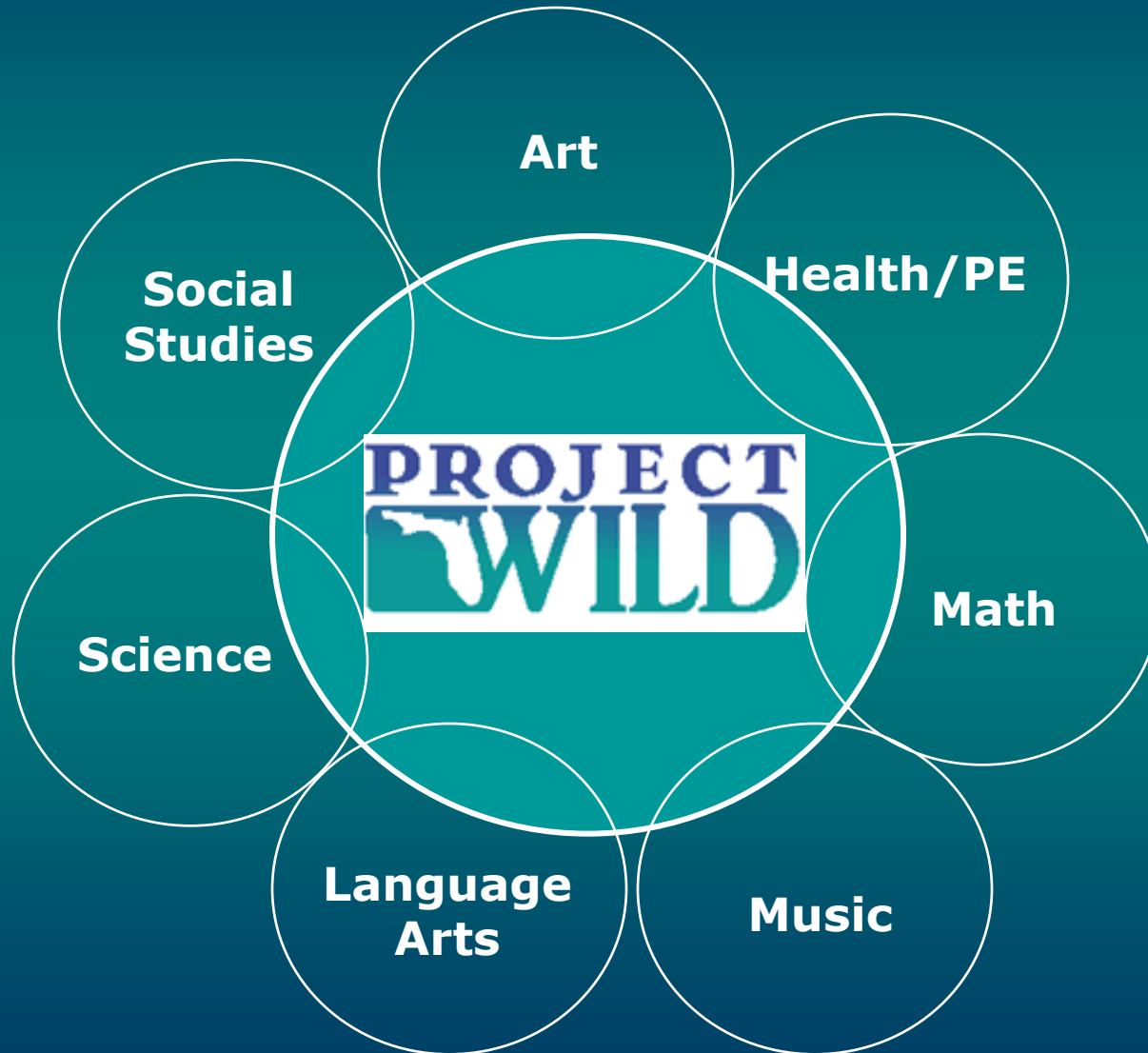
- To provide wildlife-based conservation and environmental education that fosters responsible actions toward wildlife and related natural resources.
- Teaches children **HOW** to think, **NOT** what to think.

Project WILD Goal



- Assist learners in developing awareness, knowledge, skills and commitment to result in informed decisions, responsible behavior and constructive actions towards wildlife and the environment we share.
- Take students from **AWARENESS** to **ACTION**.

Interdisciplinary Subject Areas



Who uses Project WILD?

Classroom teachers,
public/private schools

Museum, nature and
science center instructors

Resource agency
educators



Youth Organization
Leaders,
Homeschoolers

Preschool and
daycare teachers

University
Professors

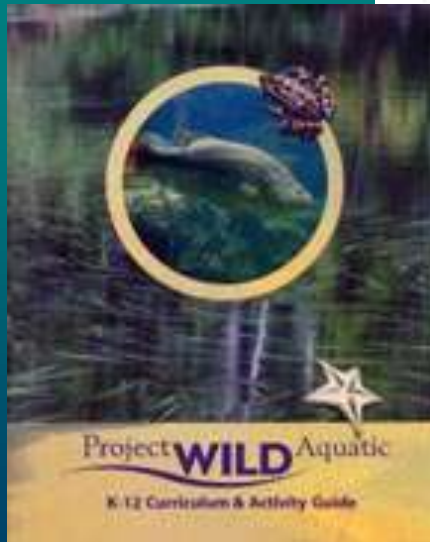
Local, state and
National park rangers
and interpreters

Project WILD Offers Educators

- Professional development workshops
- Interactive and hands-on activities
- K-12 Curriculum Guides
- Supplementary educational materials

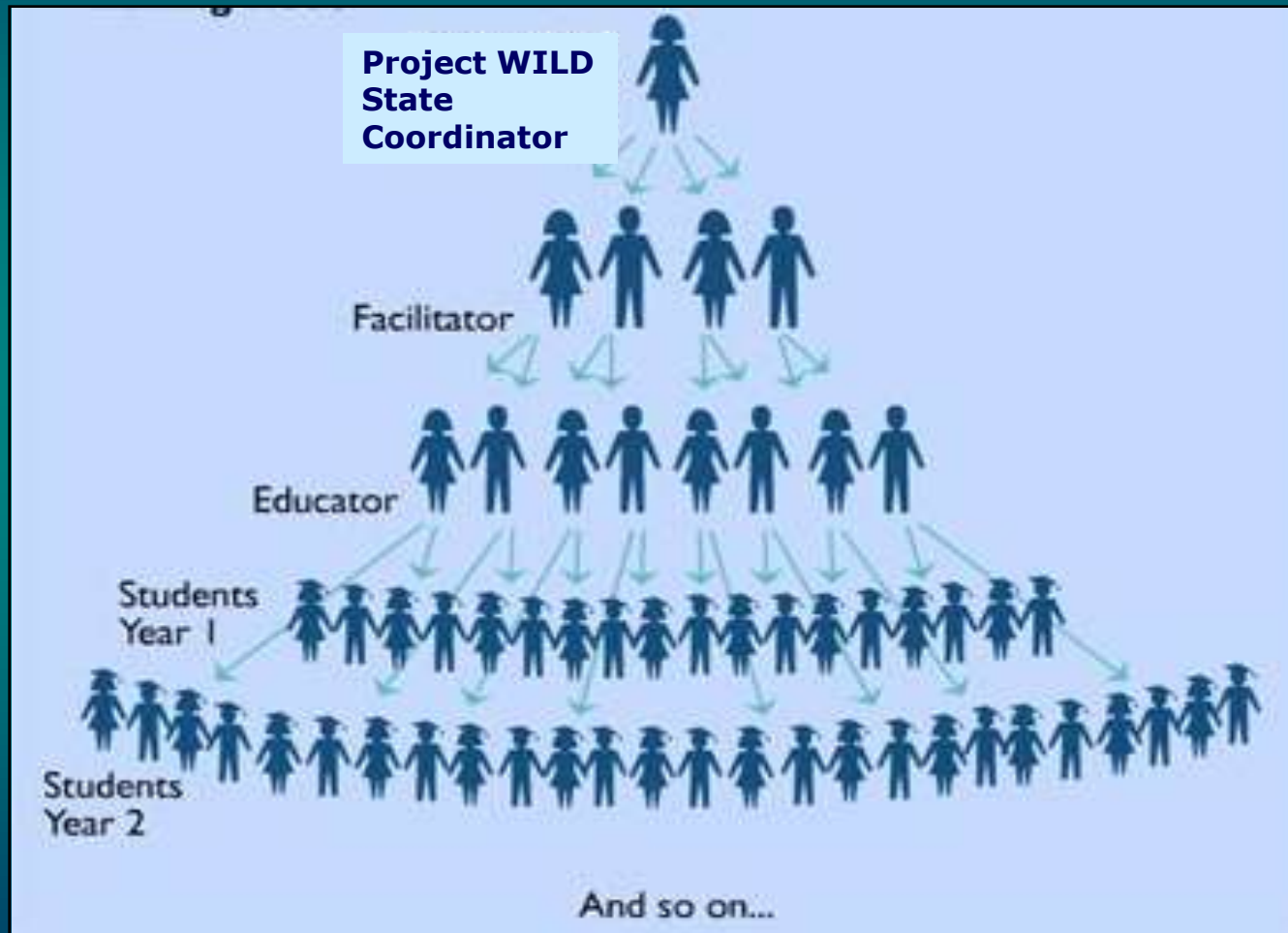


Project WILD and Aquatic WILD Guides



- 129 Project WILD activities
- 50 Aquatic WILD activities
- Interactive
- Multidisciplinary
- Includes conceptual framework
- Cross-reference by topic, grade level, activity type and assessment type
- Correlated to Florida SSS

Delivery Network for Education



Facilitators are...

- Volunteers
- Teachers
- Parents
- Park and nature center employees
- Resource professionals
- People with a commitment to wildlife conservation
- LIFE OF THE PROGRAM!



Florida Project WILD FY 2006-07 Annual Numbers

- Volunteer Network – 150
- Active volunteers – 70
- Volunteer hours – 1,229 (@ \$25/hr = \$30,725 of in-kind support)
- Number workshops facilitated – 72
- Educators reached – 1,400



Using Project WILD to Educate about Non-Natives



- Project WILD activities can easily be adapted to educate about non-native species issues
- Non-native activities are implemented into Project WILD workshops
- Volunteers are kept up-to-date about non-native issues



Non-Native Activities

Aquatic Roots

Objectives:

- Trace the origin of various non-native species and how they arrived to Florida
- Locate their native country on a map

Aquatic Roots

Objectives

Students will: 1) trace the origin of various species of local aquatic animals and/or aquatic plants; 2) compare their own native and exotic species; and 3) evaluate the appropriateness of introducing new species.

Method

Students use reference materials to research various local aquatic plants and/or animals to find out whether they are native or exotic, and to investigate their impacts on people, other animals and the environment.

Materials

A world map, paper, pencil, reference materials, and a list of local non-native plants and animals.

Background

A non-native species is a species that does not naturally occur in a specific location. While species have always migrated from one place to another, human activity has prevented that. Anthropogenic activities. Over time, human modification has changed those barriers. For example, airplanes, ships and automobiles can be transported by ships, boats, water, on clothing and boots as people move from one place to another.

Zebras and hippos have made their way into the Great Lakes through railroad cars and shipping boats. Zebras enter mammals are capable of laying over 1 million eggs each year. This population explosion is clogging the water systems of power plants and water treatment facilities, and reducing native species. Laysan ducks from Florida moved into fresh water ponds in the Great Lakes. Invasive species can also become serious and governments. People into the United States for use as a garden plant. With no natural ability to reproduce, they have become a pest. Laysan ducks have caused degradation of habitats, a loss of native species, and a loss of native species. Another example of an

Grade Level: 1-4

Subject Area: Science, Social Studies, Environmental Education

Duration: Two or three 45-minute lessons, with additional time for student research and preparation of reports.

Group Size: Small or large groups or individual students.

Setting: Classroom

Conceptual Framework Topic Reference: (NRC, 1996)

Key Terms: exotic, native, introduced species, invasive, habitat, tradeoffs, regulation

Appendix: none

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Non-Native Activities

Alien Contenders

Objectives:

- Define competition, predation, nuisance, disease, hybridize and habitat modification;
- Identify non-native species that cause problems to the environment or economy;
- Describe how or why non-native species cause problems to native

Alien Contenders (Foe, Rival, Challenger)

Adapted from Project WILD's "Good Buddies"

Objectives

Students will: 1) define competition, predation, nuisance, disease, hybridize and 2) identify non-native species that cause problems to the environment or economy; and 3) describe how or why non-native species cause problems to native species.

Method

Students research pairs of non-native and native species, play a card game and classify the pairs of species according to how they harm the non-native species-causes.

Materials

Copies of master cards; chalkboard; research materials

Grade Levels: 5-8

Subject Areas: Science,

Environmental Education,

Language Arts

Duration: two 45-minute sessions, one 15-minute session if background is properly provided, this activity requires research.

Group: Students start off with pairs. Pairs with great group of five or six students.

Settings: indoors

Key Terms: alien, invasive, competition, predation, hybridization, disease, nuisance and habitat modification.

Background

Native species are plants and animals that grew naturally in an area before humans. A non-native species is a plant or animal that does not occur naturally in an area and is usually introduced by humans. Sometimes non-natives are referred to as aliens. When a non-native species begins to spread aggressively and cause harm to the environment, the economy, and sometimes human health it is considered an invasive species. Invasive species can cause harm in a variety of ways. There are at least six different types of damage or consequences an invasive can have on a native species.

Competition: active demand by two or more organisms for limited environmental resources, such as food, water, territory, and sunlight.

Predation: biological interaction where a predator organism consumes an another living organism(s) known as prey.

Hybridization: mixing two different species or varieties of organisms to create a hybrid (an offspring).

Disease: an abnormal condition of an organism that impairs the performance of its bodily functions.

Nuisance: problem individuals or populations of certain species that may become habituated to man's presence causing unpleasant encounters, property damage or risk transfer of disease to humans or pets.

Habitat Modification: limits access to one or more of the requirements for life - food, water, shelter or space.

The major purpose of this activity is for students to become familiar with the different types of effects invasive species can have on native or beneficial species and the biotic community.

Procedure

1) Reproduce several decks of master cards. Each deck should contain 30 cards: 15 cards pairs showing a non-native and native relationship. Use the information from the first column of the information chart found at the end of this activity to create a list of pairs. Post the list on the board, a file chart or an overhead projector.



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Non-Native Activities

Cartoons and Bumper Stickers

Objectives:

- Identify cartoons and bumper stickers that are designed to make a statement about issues affecting natural resources and the environment
- Describe the influence of humor as a means for conveying information about such issues.

Cartoons and Bumper Stickers



Objectives

Students will: (1) identify cartoons and bumper stickers that are designed to make a statement about issues affecting natural resources and the environment, and (2) describe the influence of humor as a means for conveying information about such issues.

Method

Students find, analyze and discuss cartoons and/or bumper stickers.

Materials

Colored pens and strips of construction paper for bumper stickers; drawing materials for cartoons.

Background

Humor may be one of the most powerful and subtle tools used in influencing people's attitudes. The process of humor can be an efficient and pleasant means by which to communicate information. It can diffuse differences of opinion, although—if the joke isn't appreciated—it can make the differences seem even greater.

Humorous media are diverse, including magazines by stand-up comics, movies, plays, books, articles, photographs, films, paintings, commercials and more. Two of the most popular forms used in contemporary culture to make a quick political statement are bumper stickers and cartoons.

Stereotypes are a rich resource for the humorist. Stereotypes of animals frequently are used to get a laugh. There may be accuracy, but it is usually off-base to perpetuate misunderstanding. The Big Bad Wolf may be a classic case of the latter. This humor probably explains why the character is hated in the books—by comparison with what could be ridiculous or absurd.

Not all humor is meant to be funny. It may be poignant, angry, bitter or sad. Political cartoons, for example, frequently point out a range of such situations where after the initial laugh, the response may be, "That's not so funny—it's true."

Grade Level: 5-8
Subject Areas: Environmental Education, Social Studies, Language Arts, Expressive Arts
Duration: one 45-minute session; time to look for cartoons or bumper stickers
Group Size: any
Setting: indoors (use the three sections)
Conceptual Framework Topic Reference: C10, C12
Key Terms: stereotypes, media, attitudes
Appendix: Local Resources



SW Florida Exotics



CURBSIDE CARRY-OUT ON THE CAPE



TRASH

RECYCLABLES

YARD WASTE

NILE PILE

LOCAL ISLAND SHAPES

THE MICHIGAN
MAGAZINE



SANIBEL



CAPTIVA



NORTH
CAPTIVA



LITTLE
PINE
IS.

PINE
ISLAND

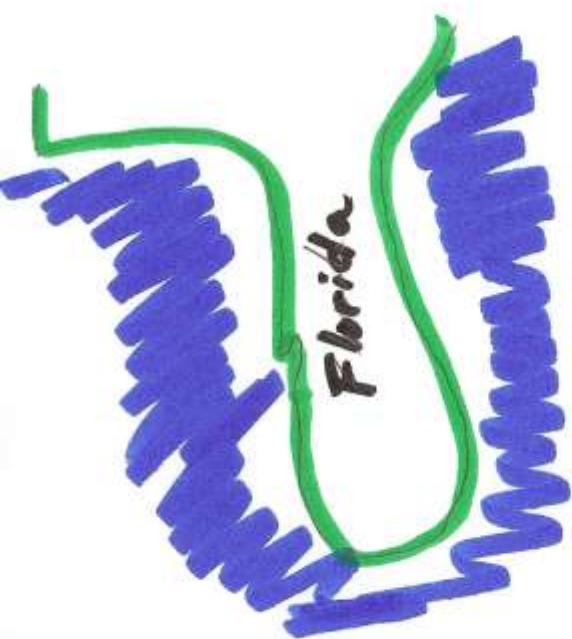


CAYO
COSTA



BOCA
GRANDE

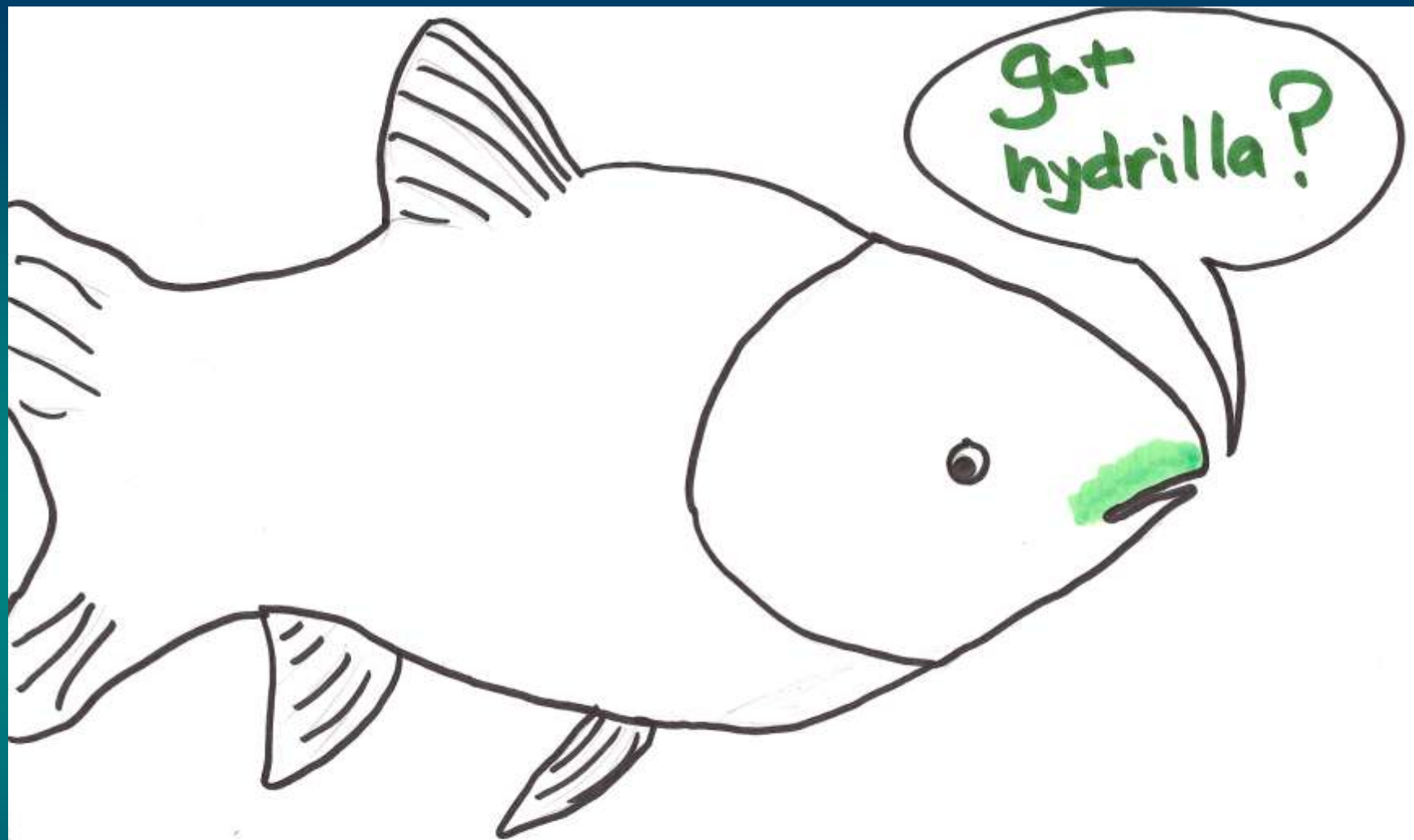
(GASPARILLA)
IGUANA
ISLAND



Florida
Exotics
ARE NOT DANCERS!!



Australian Pine Forest in Florida



"Biological Controls"

Plant Camp



- Week long summer institute for teachers about non-native plants
- FWC/Project WILD partnered with UF/IFAS – Center for Aquatic & Invasive Species to bring in non-native wildlife component



Project WILD Schools Program



- Partnership with FWC to help schools develop an ongoing commitment to conservation and environmental education through regular use of WILD activities.
- Different from traditional approach in that activities are implemented with all students in a designated grade level(s).

Project WILD Schools Program



Provides schools with:

- Training
- Field trips
- Guest speakers
- Resources
- Nature books
- Engraved plaque
- WILD Schools flag

Project WILD Schools Program



Schools promise to complete:

- Seven to ten Project WILD activities per grade level
- Two activities focusing on non-native species
- Reporting form and evaluation



Project WILD Schools Program

Charter Members:

- Greenacres Elementary – West Palm Beach, Florida
Whole school
- Lakeland Christian School – Lakeland, Florida
4th grade



Florida Project WILD Contacts

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