

Department of Defense Legacy Resource Management Program

11-437

Sustainable Cooperative Invasive Species
Management Areas (CISMAs) for Effective
Management on Military Bases and Adjacent
Lands across Florida

ANNUAL REPORTS (2011) AND WORK PLANS (2012)

Kristina Serbesoff-King and Perrin Penniman The Nature Conservancy Florida Chapter March 2012

Sustainable Cooperative Invasive Species Management Areas (CISMAs) for Effective Management on Military Bases and Adjacent Lands across Florida



Submitted to:

Department of Defense Legacy Resource Management Program 1225 S. Clark Street, STE 1500 Arlington, VA 22202

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March 2012

DoD Legacy Program Project No. 11-437 Cooperative Agreement No. W9132T-10-2-0045 Modification No. P00001 Performance Period 7/1/2011 - 6/30/2012



Partners:

U.S. Environmental Protection Agency U.S. Dept of Agriculture- N.R.C.S. U.S. Department of Defense Florida Forest Service Florida Fish and Wildlife **Conservation Commission** Florida Department of **Environmental Protection** Florida Department of Transportation Florida Native Plant Society Northwest Florida Water Management District University of Florida-IFAS The Nature Conservancy **Escambia County Washington County** Okaloosa County Walton County Choctawhatchee Basin Alliance **Holmes County** Santa Rosa County Blackwater River Foundation, Three Rivers RC&D

2011 Annual Report

Non-native invasive species (NNIS) are estimated to cost hundreds of millions of dollars annually in Florida in lost productivity and management expenses. Additionally, nearly half of the threatened and endangered species in our state face extinction as a result of NNIS. Political boundaries surrounding these imperiled organisms' habitat (ie. "State Park") do little to prevent infestations of non-native plant and animal invaders. As a way to cross boundaries and strategically address NNIS infestations, Cooperative Invasive Species Management Areas (CISMA's) offer a network for public and private land managers and other concerned parties to share resources, coordinate efforts and disseminate new information about NNIS invasions and treatment across the region.

The Six Rivers CISMA truly crosses boundaries, reaching over

the Florida/Alabama state line to coordinate the treatment of nonnative invasive species. This Gulf Coastal region is recognized as a biodiversity "hotspot" and is also home to some of the largest, most undisturbed and most contiguous



conservation properties in the southeast. For these reasons, invasive species control is essential for maintaining quality

wildlife corridors and outstanding recreational opportunities for the community. Six Rivers CISMA partners are as diverse as the flora and fauna, ranging from military installations to state and county land to private non-profit nature preserves. Through planning and cooperation, the CISMA helps protect the whole region from weed invasion.

2011-2012 Steering Committee:

CISMA Contact: <u>bsaari@ufl.edu</u>	Mark Gibson, United States Navy				
Brooke Saari, Univ. of Florida-IFAS (Chair)	Dennis Teague, Eglin Air Force Base				
Craig Iverson, Florida Forest Service	Steve Bennett, The Nature Conservancy				

2011 Accomplishments:

- 4 cooperative workdays (2 Niceville, 1 Eglin AFB, 1 Pensacola) (Goals 4.2.2,4.2.4)
- Public Awareness events (Goals 6.1.4.1, 6.3.1)
 - 1. Private Property Owner's workshop}
 - 2. Nursery Survey
 - 3. Invasive Plant ID and treatment seminar
 - 4. In-Service Trainings
 - 5. Social Media Campaign
- Produced "Top 5 Problematic Species" List (Goals 4.1.1, 4.1.2)
- Identified all known invasive species within the CISMA area (Goal 4.1.2)
- 80 acres of treatment on private land adjacent to conservation lands (Goal 4.2.2)



One of four Cooperative workdays in 2011

- Presentation/attendance at Florida Exotic Pest Plant Council (FLEPPC) and SE Pesticide Applicator's Group (Goal 6.1.3)
- Held 3 membership meetings (March 8th, July 21st, December 1st) (Goals 3.1.1)
- Completed a 2012 Annual Work Plan and 2011 Annual Report (Goal 1.2.5)



Chinese tallow tree before treatment



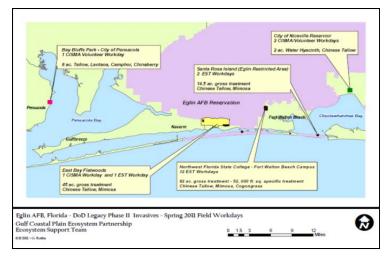
Chinese tallow tree after treatment

Challenges:

Like many organizations, we are finding we must be more productive with fewer people in order to accomplish quality work. As partner agencies reduce their staff numbers, a valuable body of institutional knowledge leaves with them, ranging from the specific locations of weed populations to experience applying for funding opportunities. However, we have maintained a strong alliance among our cooperators and look forward to networking across the state to increase the awareness and ability of the CISMA. We are a looking for new partnerships and interested members to further the mission of the CISMA and ensure a lasting impact in the Six Rivers region.

Networking within the panhandle is a challenge because of the vast area the Six Rivers CISMA covers. While we are proud of the cross-agency communication we have developed, we struggle in

reaching private landowners to explain the importance of non-native invasive species control. In the coming year we will make community outreach a major objective and hope we can increase the leadership diversity of our membership to better reflect the property ownership demographics of our region. This effort should result in more access to key habitat sites, as well as increase our abilities to accomplish goals and objectives set out in our annual work plan.



The Six Rivers CISMA 2011 workplan was ambitious in trying to develop the CISMA structure while also coordinating on-the-ground treatment programs, community outreach and prevention strategies. While ambitious goals are important in making the progress, when time and funding became limited many of our work plan items had to be rolled-over to the 2012 agenda. This year we have scaled back our objectives in order to facilitate more accomplishments than roll-overs.

Next Steps:

CISMA Structure: maintain leadership and institutional knowledge despite changes in membership. Streamlined 2012 work plan with prioritized goals and more attainable objectives. Continue holding semi-annual membership meetings in 2012.

Prevention: continue quarterly updates and reviews of invasive terrestrial and aquatic plant data.

ED/RR: create a list of high priority Early Detection/Rapid Response plant species.

Control: review and update our existing list of control species; retreatment of 2011 control project site (see map inset), also targeting new acres on the same property adjacent to Eglin Air Force Base.

Monitoring/Mapping: recruit and train University of Florida–Milton students in control and ED/RR species identification, reporting and verification.

Outreach: Maintain our strong record of trainings, public awareness events, press releases and in-service seminars. We will also be offering a Forest Stewardship Workshop in January, '12 broadcast in 7 counties through UF–IFAS offices.



NW Florida State College-Ft. Walton Campus will be the site of 2012 control project.

Six Rive	rs CISMA 2	2012 W	ork Plan					
Number	Goal	Taxa	Year	Action	Due Date	Lead	Completed	Notes
1.1.4	CISMA	all	2012	Initially and as needed, create standing subcommittees and ad hoc committees to assist with project specific CISMA efforts.			Yes	In 2010, created committee per goal, plus funding committee.
1.2.2	CISMA	all	Annually	<u>Annually</u> recruit new, and maintain current membership in the CISMA.	12/31/2012			Need to appoint lead.
1.2.3	CISMA	all	2012	Initially and every 2 years (or as needed) review steering committee and subcommittees and revise as appropriate.	As needed		yes	Reviewed and updated at July 21, 2011 meeting. Suggest review at Dec. 1, 2011 meeting.
1.2.4	CISMA	all	Annually	Annually develop workplan with CISMA partners.	12/31/2012		partial	2012 plan is in draft stage. Review at 12/1/2011 meeting.
1.3.1	CISMA	all	Annually	Annually encourage public land conservation managers to submit FFWCC IPMS cost reimbursement program applications.	12/31/2012			Escambia (Jimmie, Anne), Walton (Sarah), Okaloosa and Niceville (Sheila).
1.3.2	CISMA	all	2012	Identify lead partner or organization to serve as the recipient and administrator for grants.	6/30/2012	TNC		TNC received 3rd year of DoD Legacy Funding. No funding identified beyond 6/30/2012.
2.1.1	Prevent	all	Quarterly	Quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants adjacent to CISMA. If new plant species is found, include in EDRR prioritization.	3/31/2012	A. Stiles		Locate and list taxa located outside but proximal to CISMA. Need query tool from EddMapS. How to combine searches w/ EDRR?
2.1.2	Prevent	all	Quarterly	Quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants adjacent to CISMA waters. If new plant species is found adjacent to CISMA, include in EDRR prioritization.	3/31/2012	A. Stiles		Locate and list taxa located outside but proximal to CISMA. How to combine searches w/ EDRR?
2.2.1	Prevent	all	2012	Develop and/or find and use existing guidelines for vehicle, boats, equipment, personal protective equipment and personnel disinfection program/protocol(s) to address the unintentional movement of terrestrial and aquatic invasive plants. Consider using FFWCC IPMS or other decontamination standards.	12/31/2012	A. Stiles		
2.2.2	Prevent	all	2012	Implement vehicle, boat, equipment and personnel disinfection program/protocol(s) for use by CISMA partners (researchers, fire	12/31/2012	Need lead		Postponed from 2011: Need lead

				crews, public works, FDOT, FDOF, and others).				
2.3.1	Prevent	Plants	Annually	Annually review results of WRA for plant species to be watched. If new plant species is listed as invasive, include in EDRR prioritization.	12/31/2012	need lead		UF runs WRA and provides list, and takes requests
2.4.1	Prevent	all	Quarterly	Quarterly review EDDMapS database and other sources of new species alerts (for example - USGS NAS database, shell collecting groups, bird boards, etc) for new invasive animals adjacent to CISMA. If new animal species is found adjacent to CISMA, include in EDRR prioritization.	3/31/2012	A. Stiles		Craig Iversen has been helping with this
2.5.1	Prevent	all	2012	Assist and participate in FFWCC or other Pet Amnesty Days.	12/31/2012	B. Saari		
2.7.1	Prevent	all	Quarterly	Quarterly review EDDMapS database for new invasives adjacent to CISMA. If new pest or pathogen is found adjacent to CISMA, include in EDRR prioritization	3/31/2012	A. Stiles		
3.1.1	ED/RR	all	Annually	Annually have CISMA partners discuss new plant species that they have observed during the regularly scheduled meeting.	12/31/2012	Need lead		add to agenda for each meeting
3.1.2	ED/RR	all	Quarterly	Quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive plants within CISMA. If new plant species is found in CISMA, include in EDRR prioritization.	12/31/2011	C. Iversen		last done 4th qtr. of 2011
3.1.3	ED/RR	all	Quarterly	Quarterly review EDDMapS and/or USGS NAS for new aquatic invasive plants within CISMA waters. If new plant species is found in CISMA, include in EDRR prioritization.	3/31/2012	C. Iversen		last done 4th qtr. of 2011
3.1.5	ED/RR	all	2010	Identify local and regional experts to aid in identification of unkonwn species.	ongoing	C. Iversen	yes	UWF, UF, FNPS botanists. Contact D. Miller? FNAI?
3.2.1	ED/RR	all	2012	Create a list of possible EDRR terrestrial and/or aquatic plant species from best available information from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.	3/8/2011	C. Iversen	yes	list has been created (3/8/11). Update for 2012?
3.2.2	ED/RR	all	2012	Reduce list to top 20 EDRR species.	6/30/2012	C. Iversen		

		i'		Annually have CISMA partners discuss new				
3.4.1	ED/RR	all	Annually	animal species that they have observed	12/31/2012	C. Iversen		add to meeting agendas
		 '	<u> </u>	during the regularly scheduled meeting.				
3.4.2	ED/RR	all	Quarterly	Quarterly review EDDMapS database and/or other alert system databases for new terrestrial invasive animals within CISMA. If new species is found in CISMA, include in EDRR prioritization.	3/31/2011	C. Iverson?		
3.4.3	ED/RR	all	Quarterly	Quarterly review EDDMapS and/or databases for new aquatic invasive animals within CISMA waters. If new species is found in CISMA, include in EDRR prioritization.	3/31/2011	C. Iverson? B. Saari?		
4.1.1	Control	all	2012	Develop a list of known invasive plants within CISMA boundaries.	9/30/2012	D. Teague / M.Gibson		need status
4.1.2	Control	all	Annually	Prioritize invasive plant control species using a ranking system (USGS, local expert opinion, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS.	3/8/2011	D. Teague / M.Gibson	yes	cogongrass, privet, torpedo grass, tallow tree, japanese climbing fern
4.2.2	Control	all	Annually	Annually increase acres of priority invasive plant control species being treated and acres under maintenance level control on public conservation lands (for example - using FFWCC IPMS and other funds).	6/30/2012	D. Teague / M.Gibson		total acreage treated by species for 2012
4.2.4	Control	all	Annually	Annually coordinate a cooperative workday focusing on priority invasive plant control species.	12/31/2012	S. Dunning/ D. Teague	yes	Need to establish 2012 dates
5.1.1	Data	all	Quarterly	Quarterly record invasive species from field observations and mapping projects into CISMA EDDMapS and/or FNAI's invasive databases. Encourage use of EDDMapS for EDRR species and single occurrence entry and FNAI for large census/polygon data.	12/31/2011	S. Kalinoski		EddMapS workshop 10/21/10.
5.1.2	Data	all	Annually	Annually recruit and assign plant verifier(s) to oversee CISMA plant record entries into EDDMapS.	12/31/2012	S. Kalinoski		Need status
6.1.2	Outreach	all	Quarterly	Quarterly or as needed, maintain and improve CISMA website.	As needed	Need lead		Begin updates with WRA links, etcAug 2011. Christa Barlow/UGA is webmaster: cbarlow@uga.edu

6.1.3	Outreach	all	Annually	Participate in statewide CISMA monthly calls and FLEPPC annual CISMA meeting (both coordinated by FISP).		S. Dunning		
6.1.4	Outreach	all		Develop a CISMA invasive species training module to address species identified by other CISMA committees in the following categories:				pest/pathogen/aquatics also done
6.1.4.1	Outreach	Plants	2012	Plants: <u>Annually</u> conduct identification and treatment trainings with IFAS Extension Agent.	Need 2012 date	S. Dunning	yes	last was in March 2011 with Sheila Dunning
6.1.7	Outreach	all	2012	Create a communication network contact list to establish alert system for surrounding areas outside CISMA boundary.	12/31/2012			Postponed from 2011
6.2.1	Outreach	all	2012	Develop a list of environmental education centers, master gardeners, master naturalists, environmental organizations and local garden clubs to be utilized as volunteers and information distributors.	12/31/2012	Need lead or drop it		awareness and control, mapping, etc.
6.2.2	Outreach	all	2012	Develop list of schools, scout groups, community festivals, environmental festivals and others who could help with education about prevention, EDRR and control, and develop strategic relationships with environmental organizations.	12/31/2012	Need lead or drop it		awareness
6.2.3	Outreach	all	2012	Create or find existing educational materials to increase knowledge and distribute to volunteer partners.	12/31/2012	S. Dunning		
6.3.1	Outreach	all	2012	Coordinate press releases or public awareness activities.	on going	S. Dunning	yes	IFAS, CBA, TNC, Niceville workday
6.4.1	Outreach	all	2012	Identify specific private landowners for education.	12/31/2012	S. Dunning		contact ECJV for landowner info. Have January 2012 landowner workshop set-up already (Chris Demers -UF)



Partners:

USDA-NRCS

U.S. Forest Service,

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service

U.S. Dept. of Defense -Tyndall AFB

Florida Dept. of Transportation

Florida Department of

Environmental Protection

Florida Forest Service

Florida Fish and Wildlife

Conservation Commission

Northwest Florida Water

Management District

Florida Natural Areas Inventory

The Nature Conservancy

Florida Resources and

Environmental Analysis Center

University of Florida IFAS Extension

Franklin County

BASF

2011 Annual Report

Non-native invasive species (NNIS) are estimated to cost hundreds of millions of dollars annually in Florida in lost productivity and management expenses. Additionally, nearly half of the threatened and endangered species in our state face extinction as a result of NNIS. Political and jurisdictional boundaries surrounding these imperiled organisms (ie. "State Park") do little to spare critical conservation lands from highly mobile infestations. As a way to cross boundaries and strategically address NNIS infestations, Cooperative Invasive Species Management Areas (CISMA's) offer a network for public and private land managers and other concerned parties to share resources, coordinate efforts and disseminate new information about NNIS across the region.

The Apalachicola Regional Stewardship Alliance (ARSA) CISMA serves 9 counties in Florida's Panhandle (see map inset) which are home to nearly one million acres of federal, state, local and private

lands.

Additionally, our

conservation

region is

recognized as one of only 5 "biodiversity hotspots" in the United States, due to the remarkable assemblage of species and habitats. ARSA CISMA, now in its 9th year working in the area, continues to grow and evolve in an effort to address this serious problem. We originated as a small group with the specific goal of treating private property surrounding conservation lands; now we have developed into a multi-faceted cooperative with a new name, a larger reach and a formalized structure designed to help the organization endure for many years.



2011-2012 Steering Committee:

Brian Pelc, The Nature Conservancy, USFS (Chair)	Frank Price, Florida Natural Areas Inventory				
ARSA CISMA Contact: bpelc@tnc.org	Leroy Crocket, USDA-NRCS				
Judith Ludlow, U of F IFAS Extension	Drew Leslie and Greg Jubinsky, FFWCC				
Gwendolyn Jones, Tyndall AFB	Dr. Patrick Minogue, U of F, IFAS				

2011 Accomplishments:

- Updated name (formerly Apalachicola Invasive Working Group) to match CISMA format, expanded coverage area to include Bay County and new partner, Tyndall Air Force Base (Goals 1.1, 1.2)
- Created a Steering Committee (see above) (Goals 1.1, 1.2)
- Updated 4 year old regional management plan with new maps and species prioritization method (Goals 1.2 2.3, 4.1, 4.2)
- Held two membership meetings in conjunction with Apalachicola Regional Stewardship Alliance membership meetings (Goals 1.1, 1.2, 2.1, 3.1, 4.2):
 - April 7th, 2011- St. Joseph Bay Preserves Center: Approved expansion, new name and strategic planning process
 - o November 8th, 2011- St. Marks National Wildlife Refuge: Approved updated management plan, discussed 2012 annual workplan, members updated group on new species of concern.
- Held two steering committee meetings to further develop and approve the 2012 annual work plan (Goal 1.2)
 - 2011 Private Lands Project: Using
 Department of Defense Legacy funds, we hired a private contracting company to treat NNIS infestations on three private properties in Jackson County. Bordering or in close proximity to Three Rivers State Park and Apalachee Wildlife Management Area, these treatments reduced infestations of Japanese climbing fern (*Lygodium japonicum*), Chinese tallow (*Sapium sebiferum*), heavenly bamboo (*Nandina domestica*) and several other FLEPPC category one and two invasive plants. (See images 1-3) (Goal 4.2, 6.4)

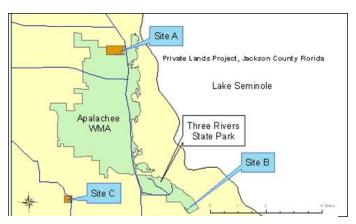


Image 1. Site location map.

Tyndall Air Force Base (AFB) is an unusual case because it is located on a cape in the Gulf of Mexico. Because of this, the lands on and adjacent to the base are somewhat buffered from directly being infested by invasive species from adjacent lands. Tyndall's main invasive species threat comes from indirect effects, such as from species within the watershed that are not adjacent to the base. Because invasive species infestations can spread quickly through a variety of vectors, we focused our efforts based upon priority of conservation lands and invasive species, not by proximity to the base. While the lands treated in this control project are not directly adjacent to Tyndall AFB they are within the watershed that threatens the base with invaders. Tyndall AFB staff support the control projects on public and private lands selected by the CISMA as most highly invaded as part of the control strategies directly affecting the base. The next control project planned for spring 2012 will be treating invasive species on private lands within a mile of Tyndall AFB.



Image 2 *L.japonicum* in 80 acres of planted pine surrounding FL Fish and Wildlife Conservation Commission conservation land in Jackson County, FL (Site A.)



Image 3. 60 days after treatment using a private contractor.

- Presentations/volunteer recruitment: Tallahassee Garden Club members and The Society for Ecological Restoration-Southeast regional conference (Goals 6.1, 6.2, 6.3, 6.4)
- ARSA CISMA members attended the FLEPPC conference and presented update information (Goal 6.1, 6.3)
- Completed 2012 annual work plan (Goal 1.2)
- Treatment for Japanese stiltgrass (*Microstegium vimineum*) at Apalachicola Bluffs and Ravines Preserve in Liberty County. This species had not previously been documented in Florida, and has the potential to spread very quickly. We have since documented another population on neighboring private property which we hope to treat in 2012 (Goal 2.1, 3.3)



Image 4. Japanese stiltgrass (*M. vimineum*) infestation at Apalachicola Bluffs and Ravines Preserve, Liberty County Florida. This invasive grass has an annual lifecycle; the above image is new growth approximately 12 months after an initial treatment



Image 5. Japanese stiltgrass infestation 45 days after treatment for the second consecutive year. In 2012 we plan two treatments to further deplete the seed bank.

Challenges:

2011 saw new growth and development in ARSA CISMA, and new dilemmas emerged alongside all of the beneficial changes we created. First off, we were a large CISMA when we covered 8 counties and now have become even larger with the addition of Bay County. This poses several challenges including getting geographic representation within our membership and steering committee. Since weed populations can vary across the landscape with changes in biogeographic characteristics, human population densities and habitat type, our CISMA's awareness and ability to respond to emerging issues is directly related to our communication across the region. In the future we will have to continue recruiting new members and leadership that represents the varied geography of our area. Human diversity creates a second challenge for us, given the dramatic differences in lifestyle across the ARSA CISMA region. We have two large population centers, in Tallahassee and Panama City, both having unique infestations and landownership issues. On the other hand, our region has some of the least populated counties in the state. This area is home to some of the poorest communities in Florida as well as some of the wealthiest landowners/developers. If our message is to reach the whole community we will have to start tailoring our material to more specific audiences. A focus on local community outreach events and utilizing IFAS extension offices may be helpful in overcoming communication breakdown.

Internal to ARSA CISMA, we had some staff changes that affected the leadership, including a new chairperson. While the mission and objectives of the cooperative remains intact, much institutional knowledge left the group with the personnel replacement. Additionally, implementing a new leadership structure has entrenched challenges, as old roles fade away, replaced by more meetings, group discussion and delegation to the committee.

Next Steps:

 CISMA Structure: continue to adapt to FL-CISMA template where appropriate, such as adopting an annual work plan, regular meetings and communiques, and bringing in a diversity of control strategies like Community Workdays, outreach efforts and expanding a volunteer base. In 2012, ARSA CISMA has already adopted an annual work plan and begun planning several outreach and workday events.



- **Prevention**: incorporate regular reviews of terrestrial and aquatic plant data using EDDMapS and iMapInvasives databases as well as working with IFAS Extension to incorporate CISMA goals for reducing new infestations into Best Management Practices for Lawn and Garden Professionals.
- Early Detection/Rapid Response: Create an ED/RR list for the region and develop a volunteer group trained in identifying the ED/RR species and control species as well as EDDMapS reporting protocol. Our 2012 agenda includes organizing a one-day EDRR task force workshop in March to prioritize EDRR species. We will then use this list to train volunteers recruited during presentations (Tallahassee Garden Club general membership meeting...completed Nov 2011, and Leon County Master Gardener's...scheduled June 2012.) We have also begun planning our first ARSA CISMA EDRR training and workday, focusing on M. vimineum along the Apalachicola River floodplain.

ARSA CISMA WORK PLAN 2012

ACTION 1. NISAW Presentation to Tallahassee Garden club and Master Gardeners about yard weed control;2nd presentation on regional EDRR priorities depending on results of EDRR taskforce meeting. National Invasive Species Awareness Week: Feb 27th-Mar 2 Brian and Judy

- 4.3.2. (modified) identify and engage yard and garden enthusiasts to voluntarily stop buying/planting known invasive plants.
- 5.1.1. record invasive species from field observations and mapping projects into CISMA EDDMapS and/or FNAI's invasive databases. Encourage use of EDDMapS for EDRR species and single occurrence entry and FNAI for large census/polygon data.
- 6.1.5. hold trainings for CISMA partners and targeted audiences on how to use the EDDMapS online database to report occurrences of invasive species (with priority placed on reporting EDRR and prevention species). species (if possible, coordinate with IFAS Extension Agent).
- 6.2.2. work with Cooperative Extension Master Gardener Program and local garden clubs to include programming that promotes the removal of invasive plants and encourages the use of non-invasive plants.
- 6.2.5. develop at least one priority education volunteer program for CISMA that simultaneously builds up volunteer programs and raises invasive species awareness (for example -, student work days, invasive survey recruitment/training programs, Pepper Busters creation, etc.)

ACTION 2. Form EDRR taskforce and host spp priority workshop to develop an EDRR list for ARSA. Brian and Frank Scheduled for April 9th

- 3.2.1. create a list of possible EDRR terrestrial and/or aquatic plant species from best available information from CISMA partners, adjacent CISMAs, CISMA prevention alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS.
- 2.3.1. <u>annually</u> review results of WRA for plant species to be watched. If new plant species is listed as invasive, include in EDRR prioritization. in EDRR prioritization.

ACTION 3. Liberty & Calhoun transportation professionals training for roadside treatment. Scheduled for April 12th Brian and Judy

species (if possible, coordinate with IFAS Extension Agent).

ACTION 4. Tyndall AFB workday coordinated to treat either control or EDRR infestations and develop relationships among various professionals in Bay CO.

- 3.3.1. conduct 1 cooperative workdays to eradicate high priority EDRR and prevention plant species (newly in or adjacent to CISMA).
- 4.2.4. coordinate a cooperative workday focusing on priority invasive plant control species.
- 5.1.5. conduct 1 partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA). Use monitoring results to inform management decisions and updates of priority lists as necessary.
- 6.1.5. hold trainings for CISMA partners and targeted audiences on how to use the EDDMapS online database to report occurrences of invasive species (with priority placed on reporting EDRR and prevention species).

ACTION 5. Panama City area private property project using DOD Legacy grant funding (\$4,000) to treat priority control spp. Due by April 15th. Brian and

4.2.7. increase net acreage of invasive plant control species treated on prioritized private lands.

DOD Legacy Grant Deliverable

ACTION 6. Partner training/workday at Apalachicola Bluffs and Ravines Preserve (TNC) to educate partners regarding EDRR species, control techniques and to treat infestations of control and EDRR species on and around the preserve. May 1st. Brian

- 3.3.1. conduct 1 cooperative workdays to eradicate high priority EDRR and prevention plant species (newly in or adjacent to CISMA).
- 4.2.4. coordinate a cooperative workday focusing on priority invasive plant control species.
- 5.1.5. conduct 1 partner workdays to survey targeted locations for new invasions focusing on high priority EDRR and prevention species (newly in or adjacent to CISMA). Use monitoring results to inform management decisions and updates of priority lists as necessary.

DOD Legacy Grant Deliverable

ACTION 7. CISMA meeting(s) both phone and in person to continue work on action items in annual plan. Late March, April...summer? Brian and Steering

- 1.2.3. review steering committee and subcommittees and revise as appropriate.
- 1.2.4. annually develop workplan with CISMA partners
 - 3.1.1. Bi-annually have CISMA partners discuss new plant species that they have observed during the regularly scheduled meeting.
 - 4.1.2. prioritize invasive plant control species using a ranking system (USGS, local expert opinion, other) and best available information from CISMA partners, FLEPPC, FISP, FNAI, IFAS and EDDMapS. meetings).
 - 7.1.1. Develop 2013 work plan

ACTION 8 . Regularly scheduled reviews of weed data. On-going, Brian Judy, Frank

plant species is found, include in EDRR prioritization. adjacent to CISMA, include in EDRR prioritization.

2.3.1. <u>annually</u> review results of WRA for plant species to be watched. If new plant species is listed as invasive, include in EDRR prioritization.

species is found in CISMA, include in EDRR prioritization.



2011 Annual Report

Partners:

Florida Fish and Wildlife Conservation
Commission
Volusia County
Volusia Soil & Water Conservation
District
U.S. Dept. of Defense, Cape Canaveral
AFS and Patrick AFB
Brevard County
Flagler County
Florida Dept. of Environmental
Protection
Florida Park Service
Florida Dept. of Transportation
The Nature Conservancy

U.S. Fish and Wildlife Service

Florida Forest Service

University of Florida IFAS

U.S. Dept. of Agriculture Natural
Resources Conservation Service
Florida Exotic Pest Plant Council
Florida Dept. of Agriculture and
Consumer Services Div. of Plant Industry
U.S. Army Corps of Engineers
U.S. Forest Service

St. Johns River Water Management

Introduction:

Non-native invasive species are estimated to cost hundreds of millions of dollars annually in Florida in lost productivity and management expenses. Additionally, nearly half of the threatened and endangered species in our state are directly threatened with extinction as a result of invasive species. As a way to cross boundaries and strategically address invasive species infestations, Cooperative Invasive Species Management Areas (CISMA's) offer a network for public and private landowners and other concerned parties to share resources, coordinate efforts and disseminate new information.

The East Central Florida Cooperative Invasive Species Management Area (ECF CISMA) serves 4 counties on Florida's east coast which comprises excellent quality federal, state and county conservation lands. The ECF CISMA partners with Cape Canaveral Air Force Station and Patrick Air

Force Base. The ECF CISMA, only in its 2nd year, continues to grow and evolve in an effort to address invasive species problems across boundary lines.



2011 Chair Positions

No formal steering committee was assigned in 2011.

Kelli Gladding, FWC Invasive Plant	Ed Northey, Volusia County Mosquito
Management Section (co-chair)	Control (co-chair)
kelli.gladding@myfwc.com	enorthey@co.volusia.fl.us

2011 Accomplishments:

- Held all partner meetings on April 14th at UF IFAS Ag Extension county offices (Flagler, Putnam, Volusia and Brevard), and October 20th in Oak Hill.
- Utilized University of Florida Polycom communication system to have meetings in multiple counties.
- Created drafts for an ECF CISMA logo and outreach brochure.
- Created a Website Committee to coordinate ECF CISMA website submissions and appearance.
- Designated the Volusia Soil & Water Conservation District address for all ECF CISMA mail.
- Attended local nature festivals to provide education about invasive species and the ECF CISMA.
- Celebrated National Invasive Species Awareness Week with two cooperative agency workdays. First workday was March 2nd at Bicentennial Park in North Ormond Beach, Volusia County. Six participants from three agencies joined together in an identification and herbicide training and removal of Brazilian pepper. The second workday on March 3rd was at the Coastal Jewel Site, in Malabar, Brevard County. This workday had 12 participants representing 5 agencies and one private contractor working to remove 250 Chinese tallow and 50 Brazilian pepper saplings and trees.
- Held one cooperative workday at the Coastal Jewel site again to complete the removal of the Chinese tallow infestation. Nine participants from 5 agencies removed 300 Chinese tallow and 10 Brazilian pepper saplings and trees, and treated 300 square feet of cogon grass.
- Held one cooperative workday at the Fox Lake Sanctuary site on November 3rd with 5 agencies and 12 participants. 50 large Chinese tallow and 75 sapling and large Brazilian peppers were removed.
- Completed CISMA 5-year strategic plan.
- Drafted an EDRR species list from CISMA member participants and a survey.
- ECF CISMA members attended FLEPPC Symposium and participated in CISMA panel discussion.



Before the Bicentennial Park workday, Volusia County staff are trained on Brazilian pepper identification, how to score the trees, and apply herbicide to the tree trunks for an effective kill. University of Florida, IFAS Agricultural Extension Office provided identification techniques along with safe machete handling.



Hack and squirt technique utilized.



Coastal Jewel Site Workday (Left to right): Steven Troy, Chris O'Hara, Damion Keene, Mable O'Quinn, Bernadette Gallagher (kneeling), Mathew Martin, Mark Mercadante, Ken Burkett, Mike Renda, Kelli Gladding (kneeling), Ralph Lloyd & Don George.



The target species at the Coastal Jewel Site workday is Chinese tallow: *Sapium sebiferum*



Typical dense infestation of Chinese tallow saplings after treatment.

Challenges and Next Steps:

- **ECF CISMA Structure and Sustainability**: Maintain quarterly meeting schedule; maintain co-chair positions; create subcommittees and leader positions to work on priority projects; update the strategic and annual plans; and utilize the ECF CISMA website.
- CISMA Connection to Statewide Efforts: Maintain relationship with the Florida Invasive Species
 Partnership (FISP) through monthly CISMA conference call, and participation with the FLEPPC
 Symposium CISMA events.
- Early Detection/Rapid Response: Finalize the prioritized EDRR plant species list for ECF CISMA; present new potential EDRR species at quarterly meetings.
- Control: Create a prioritized control plant species list for ECF CISMA.

ECF CISMA 2012 Workplan

SC= steering committee ALL = all partners

BLUE = should be done; GREEN = may get done; RED = a challenge

Number	Goal	Taxa	Year	Action	Due Date	Lead	Completed	Notes
				Initally and as needed, create standing subcommittees				
				and ad hoc committees to assist with project specific				
1.1.4	CISMA	all	Annually	CISMA efforts.	Quarterly	SC		
1.2.1	CISMA	all	Annually	Schedule CISMA meetings 3-4 times per year.	Quarterly	Co-chairs		
				<u>Annually</u> recruit new, and maintain current membership				
1.2.2	CISMA	all	Annually	in the CISMA.	Quarterly	ALL		
				Review chair, co-chair, steering committee and				
1.2.3	CISMA	all	Annually	subcommittees and revise as appropriate.	Quarterly	SC		
1.2.4	CISMA	all	Annually	Annually develop workplan with CISMA partners.	April-12	Mike		
1.2.5	CISMA	all	Annually	Create short annual report.	January-13	Mike		
				Annually encourage public land conservation managers				
				to submit FFWCC IPMS cost reimbursement program				
1.3.1	CISMA	all	Annually	applications.	Quarterly	ALL		
				Identify lead partner or organization to serve as the				
1.3.2	CISMA	all	Annually	recipient and administrator for grants.	December-12	SC		
				Quarterly review EDDMapS database and/or other alert				
				system databases for <u>new terrestrial invasive plants</u>				
				adjacent to CISMA. If new plant species is found, include				
2.1.1	Prevent	all	Quarterly	in EDRR prioritization.	Quarterly	Mike		
				Quarterly review EDDMapS and/or USGS NAS for new				
				aquatic invasive plants adjacent to CISMA waters. If				
				new plant species is found adjacent to CISMA, include in				
2.1.2	Prevent	all	Quarterly	EDRR prioritization.	Quarterly	Kelli		

				<u>Annually</u> review results of WRA for plant species to be watched. If new plant species is listed as invasive, include			
2.3.1	Prevent	all	Annually	in EDRR prioritization.	December-12	Mike	
				Quarterly review EDDMapS database and other sources			
				of <u>new species alerts</u> (for example - USGS NAS			
				database, shell collecting groups, bird boards, etc) for			
				new invasive animals adjacent to CISMA. If new animal			
				species is found adjacent to CISMA, include in EDRR			
2.4.1	Prevent	all	Quarterly	prioritization.	Quarterly	ALL	
				Quarterly review EDDMapS database for new invasives			
				adjacent to CISMA. If new pest or pathogen is found			
2.7.1	Prevent	all	Quarterly	adjacent to CISMA, include in EDRR prioritization	Quarterly	ALL	
				Annually have CISMA partners discuss new plant species			
	50 /DD	.,		that they have observed during the regularly scheduled	5 1 43		
3.1.1	ED/RR	all	Annually	meeting.	December-12	Co-chairs	
				Quarterly review EDDMapS database and/or other alert			
				system databases for <u>new terrestrial invasive plants</u> within CISMA. If new plant species is found in CISMA,			
3.1.2	ED/RR	all	Quarterly	include in EDRR prioritization.	Quarterly	Mike	
3.1.2	LD/ KK	all	Quarterry	Quarterly review EDDMapS and/or USGS NAS for new	Quarterly	IVIIKE	
				aquatic invasive plants within CISMA waters. If new			
				plant species is found in CISMA, include in EDRR			
3.1.3	ED/RR	all	Quarterly	prioritization.	Quarterly	Mike	
				Create a list of possible EDRR terrestrial and/or aquatic			
				plant species from best available information from			
2 2 1	רר /חח	011	2012	CISMA partners, adjacent CISMAs, CISMA prevention	Dosombar 13	CC	
3.2.1	ED/RR	all	2012	alert system, FLEPPC, FISP, FNAI, IFAS and EDDMapS. Use a ranking system (USGS, others) to prioritize top 10	December-12	SC	
3.2.2	ED/RR	all	2012	EDRR plant species.	December-12	SC	
	,			Annually have CISMA partners discuss new animal			
				species that they have observed during the regularly			
3.4.1	ED/RR	all	Annually	scheduled meeting.	Quarterly	Co-chairs	

		I	ı	0			Ī	l
				Quarterly review EDDMapS database and/or other alert				
				system databases for <u>new terrestrial invasive animals</u>				
				within CISMA. If new species is found in CISMA, include in				
3.4.2	ED/RR	all	Quarterly	EDRR prioritization.	Quarterly	ALL		
				<u>Quarterly</u> review EDDMapS and/or databases for <u>new</u>				
				aquatic invasive animals within CISMA waters. If new				
3.4.3	ED/RR	all	Quarterly	species is found in CISMA, include in EDRR prioritization.	Quarterly	Kelli		
				Prioritize invasive plant control species using a ranking				
				system (USGS, local expert opinion, other) and best				
				available information from CISMA partners, FLEPPC,				
4.1.2	Control	all	2012	FISP, FNAI, IFAS and EDDMapS.	December-12	SC		
				Emphasize top 2 priority invasive plant control species by				
4.2.1	Control	all	2012	focusing CISMA partner efforts.	December-12	SC		
				Annually increase acres of priority invasive plant control				
				species being treated and acres under maintenance level				
				control on <u>public</u> conservation lands (for example -				
4.2.2	Control	all	Annually	using FFWCC IPMS and other funds).	December-12	All		
7.2.2	Control	un	7 timadily	using 11 ween wis and other janus).	December 12	7 (11		
				Annually increase acres of priority invasive plant control				
				species being treated and acres under maintenance level				
				control on <u>private</u> conservation lands (for example - non-				
				profit conservation lands, conservation easement lands,				
4.2.3	Control	all	2012	etc.).	December-12	George		
4.2.3	Control	all	2012	Coordinate two CISMA cooperative workdays focusing on	December-12	George		
4.2.4	Control	all	Bi-annually		December-12	ALL		
4.2.4	Control	dII	BI-dilludily	priority invasive plant species.	December-12	ALL		
				Overtant, record investiga anadias from field absorbations				
				Quarterly record invasive species from field observations				
				and mapping projects into CISMA EDDMapS and/or				
				FNAI's invasive databases. Encourage use of EDDMapS				
				for EDRR species and single occurrence entry and FNAI				
5.1.1	Data	all	Quarterly	for large census/polygon data.	Quarterly	ALL		

				Recruit and assign plant verifier(s) to oversee CISMA			
5.1.2	Data	all	Annually	plant record entries into EDDMapS.	December-12	SC	
			,	Recruit and assign animal verifiers to oversee CISMA			
5.1.3	Data	all	Annually	animal record entries into EDDMapS.	December-12	SC	
				<u>Quarterly or as needed</u> , maintain and improve CISMA			
6.1.2	Outreach	all	Quarterly	website.	Quarterly	George	
				Participate in statewide CISMA monthly calls and FLEPPC			
6.1.3	Outreach	all	Annually	annual CISMA meeting (both coordinated by FISP).	Monthly	Kelli	
New	Outreach	all	2012	Create a CISMA logo	July-12	SC	
	1						
New	Outreach	all	2012	Create a CISMA brochure	December-12	SC	
New	Outreach	all	2012	Partner with FVMA to achieve CISMA goals	December-12	Ed	
				Participate in 3 public events (county fairs, festivals) by			
				providing educational information about priority invasive			
New	Outreach	all	2012	species.	December-12	ALL	
				Annually contact the media through press/photo			
				releases and radio to highlight CISMA efforts on invasive			
				species. Consider doing this during National Invasive			
6.1.4	Outreach	all	Annually	Species Awareness Week (held annually in spring).	December-12	SC	
				Hold <u>annual</u> trainings for CISMA partners and targeted			
				audiences on how to use the EDDMapS online database			
				to report occurrences of invasive species (with priority			
6.1.5	Outreach	all	Annually	placed on reporting EDRR and prevention species).	December-12	SC	
				Maintain and improve CISMA knowledge by			
				communicating with experts (for example - invite experts			
6.1.6	Outreach	all	Annually	to present information at CISMA meetings).	Quarterly	SC	
				Annually conduct at least one invasive terrestrial plant	,		
				identification and treatment training focusing on priority			
				prevention, EDRR and control species (if possible,			
6.1.7	Outreach	all	Annually	coordinate with IFAS Extension Agent).	December-12	SC	1



Heartland CISMA

Cooperative Invasive Species Management Area

2011 Annual Report

Introduction:

Non-native invasive species (NNIS) are estimated to cost hundreds of millions of dollars annually in Florida in lost productivity and management expenses. Additionally, nearly half of the threatened and endangered species in our state are directly threatened with extinction as a result of NNIS, with NNIS not respecting political and jurisdictional boundaries. As a way to cross boundaries and strategically address NNIS infestations, Cooperative Invasive Species Management Areas (CISMA's) offer a network for public and private land managers and other concerned parties to share resources, coordinate efforts and disseminate new information about NNIS across the region.

The Heartland CISMA serves 4 counties in central Florida (see map inset) which are home to 445,000 acres of federal, state, local and private conservation lands. The Lake Wales Ridge, running north-south through the Heartland CISMA, is a biodiversity hotspot with a high rate of endemism-species that exist nowhere else on earth. Unfortunately, these tremendous natural assets share the same threat from NNIS infestations as all other regions of Florida. The Heartland CISMA continues to grow and evolve in an effort to address this serious problem. We originated as the Invasive Species Committee of the Lake Wales Ridge Ecosystem Working Group with the goal of focusing on cooperatively dealing with the threat of NNIS; now we have developed into a multi-faceted cooperative with a new name, a larger reach and a more formal structure.

2011 Steering Committee

Cheryl Millett, The Nature Conservancy	Keeli Carlton, Polk County
(Chair)	Environmental Lands
Heartland CISMA Contact:	Erik Egensteiner, Florida Park Service
cmillett@tnc.org	
Clarence Morgan, Avon Park Air Force	Bob Nelson, The Nature Conservancy
Range	
Debi Tharp, The Nature Conservancy	

Partners:

Archbold Biological Station Bok Tower Gardens

Florida Department of Agriculture and **Consumer Services Division of Plant** Industry

Florida Department of Environmental Protection

Florida Exotic Pest Plant Council Florida Fish and Wildlife Conservation Commission

Florida Forest Service Florida Invasive Species Partnership

Florida Natural Areas Inventory

Florida Park Service

Highlands County

Polk County Environmental Lands

South Florida Water Management District

Southwest Florida Water Management District

The Nature Conservancy

US Department of Agriculture-Natural **Resources Conservation Service**

US Dept. of Defense

US Fish and Wildlife Service

University of Florida IFAS Extension,

University of Georgia, Center for **Invasive Species and Ecosystem**

University of South Florida Polytechnic-Florida Industrial and Phosphate Research Institute

2011 Accomplishments:

- Presented the Heartland CISMA to Lake Wales Ridge Ecosystem Working Group on January 10th to raise awareness and recruit members. Provided three speakers about invasive species topics for September 27th LWREWG meeting (EDDMapS, Black and White Tegus, and Laurel Wilt Disease). Followed by site visits of Jenny Ketterlin of FFWCC at three locations in Hardee, Polk and Highlands counties with tegu sightings or
 - tracks reported to plan next steps to find and remove this new species in our region.
- Created a Steering Committee (see above) and four subcommittees: prevention, EDRR/control, aerial survey and website. Ad hoc committees were formed throughout the year to plan and conduct projects.
- Created 2011 annual workplan to guide work based on the five-year strategic plan developed for 2010-2015.
- Held two membership meetings:
 - April 12th Lake Wales Ridge State Forest : Approved committees and 2011 workplan, received EDDMapS training, introduction to new invasive species
- INVASIVE SPECIES
 SCAVENGER HUNT

 Your mission, should you chose to accept it, is to find and report any sightings of exotic invasive species.

 **Miles:

 1. Contexturis must upheat original photoe of their unique (not previously recorded) finds wis must be fortioned in their unique (not previously recorded) finds wis must be fortioned in the service of the top 13 Month invasing their more detailed cales can be found at the mission of the more shall invade more detailed cales can be found at their manner tale Mills with a feature of the more shall invade of the more shall invade of the more shall be cales in the notes shall constructed the more shall construct the more shall constructed the more shall construct the more shall be shal

Figure 1. Early Detection Scavenger Hunt teaser flyer.

- identified by member Mike Sowinski, update on laurel wilt disease distribution, biology, signs and reporting.
- April 19th short meeting following the Lake Wales Ridge Working Group meeting on outreach/education to sign up volunteers for subcommittees, share information and disseminate new USFS guides to identification and management of invasive species in southern forests.
- Developed and disseminated an identification and treatment guide to the top-ranked EDRR (early detection, rapid response) species early in the year.
 - Developed a laminated card deck to identify the top EDRR species in spring in conjunction with other CISMAs and disseminated.
- Went above and beyond for National Invasive
 Species Awareness Week, conducting:
 - The 1st annual Central Florida Invasive Species Workshop, February 10th, at Circle B Bar Reserve, with 50+ attendees and 16 presentations about a wide variety of invasive species topics.
 - Ridge Rangers workdays focused on invasive treatment and mapping on conservation lands around NISAW.
 - Early Detection Scavenger Hunt (Figure 1), February 1st-March 31st, to solicit reports of priority EDRR species sightings, with media coverage in the Ledger and on Bay News 9 TV, Polk bureau.



Figure 2. Field demonstration at Forest Stewardship invasive identification and control workshop November 17th at Circle B Bar Reserve.

o Beginner Invasive ID workshop, February 23rd, at Circle B Bar Reserve, with 15 attendees.

- Intermediate/Advanced Invasive ID & treatment workshop, February 24th, at Circle B Bar Reserve, with
- Held two fall invasive ID and treatment workshops:
 - o Invasive grass ID and control workshop, October 19th at Circle B Bar Reserve, with 44 attendees.
 - o A Forest Stewardship Workshop: Invasive Exotic Plants and Their Control, November 17th at Circle B Bar Reserve, with 48 attendees (Figure 2).
- Renewed the Early Detection Scavenger Hunt, a contest with prizes for the most high priority invasive species reported from August through February 2012.
- Conducted 2011 Private Lands Projects: Using Department of Defense Legacy and Partners for Fish and Wildlife funds, treated NNIS



Figure 3. Heartland CISMA/Avon Park Air Force Range treatment site locations.

infestations on three properties in Highlands County (Figure 3):

- In April, The Nature Conservancy's Lake Wales Ridge Ecosystems Services Team treated cogon grass (Imperata cylindrica), a priority control species for the Heartland CISMA and for the Avon Park Air Force
 - Range (Figure 4). December follow-up found no regrowth.
- In April, treated infestations on two adjacent private properties suspected be reinfesting the range with Old World climbing fern (Lygodium microphyllum) across the fence-line. Old World climbing fern is a priority control species for the Heartland CISMA and for the Avon Park Air Force Range. December follow-up treated regrowth (Figure 5).
- Pursued options to conduct a biennial aerial survey to find remote infestations of Old World climbing fern within the CISMA:
 - Created a proposal to Patrick Air Force Base in March seeking aircraft and pilot assistance for a survey in February 2012 in exchange for providing training similar to search and rescue. The proposal was turned down.

Figure 4. Member of The Nature Conservancy's Central Florida Ecosystem Support Team treating cogon grass treatment at Avon Park Air Force Range April 2011.

- o Conducted pilot survey of northwestern Green Swamp in with LightHawk, a volunteer pilot service aiding conservation, and presented the possibility to the CISMA members.
- Shared the results of an aerial survey of central Florida conducted by the National Park Service and South Florida Water Management District in 2010 to map invasive plants in survey plots.
- Represented Heartland CISMA at Florida Exotic Pest Plant Council symposium in May:

to

- Participated on panel at FLEPPC symposium, May 18th.
- Contributed talk titled, "Aerial surveys of invasives on the Lake Wales Ridge:
 Limitations, lessons learned, and lots of value," and conducted outreach, "Active detection networks Invasive Plants know NO Boundaries, Do You?", at workshop at FLEPPC symposium, May 20 th.
- Contributed to Florida CISMAs poster at FLEPPC symposium.
- Kept in contact with members via email, updated the website to include current projects and calendar items, and began tweeting @HeartlandCISMA.
- Completed 2012 annual work plan.



Figure 5. Treated Old World climbing fern on private property adjacent to APAFR during monitoring visit after 6 months in December 2011.

Challenges:

We have most participation from Polk County members and would like more parity in geographic representation. Outreach to invite participation in other counties has been only partially successful to date. Staff cuts at partner organizations led to loss of several active members. Our focus is to provide training and information-sharing opportunities (like this year's workshops) as outreach to professionals. We will have to continue recruiting new members and leadership that better represents the geographic diversity of our area. Trying to formalize committees was not very successful, but using ad hoc committees to work on projects was very successful, so we will continue that approach. Enthusiasm for the Early Detection Scavenger Hunt was high but participation was low, so we extended the entry period to times when more plants are actively growing and easier to identify, and created a catchy flyer (see Figure 1) to attract more attention.

Next Steps:

- **CISMA Structure**: Continue steering committee structure, add co-chair, define roles, all project committees ad hoc. Continue updating website, regular communication with members by email, tweets. Two meetings per year: one to adopt annual workplan, vote in steering committee, and one to assess workplan progress, both with outside speakers to draw participation.
- **Prevention**: Share EDDMapS alerts of new invaders and new pest/pathogen alerts with group via email and at meetings. Run new invasive, Red Root Floater, through Aquatic Weed Risk Assessment.
- Early Detection/Rapid Response: Include EDRR species in an identification and treatment workshops. Seek funding to reprint EDRR ID deck to disseminate further. Continue Early Detection Scavenger Hunt to gain more reports. Begin partner workdays with Ridge Rangers to treat new EDRR species infestations.
- Control: Continue to focus on priority control species.
- Monitoring and Mapping: Encourage and train on use of EDDMapS for reporting EDRR species. Encourage
 and share information from aerial surveys for Old World climbing fern to identify remote infestations to be
 treated.
- **Outreach**: Create and disseminate event flyers to invite general participation. Create general outreach PowerPoint for use by members. Tweet about CISMA activities and invasive subjects.

Heartland CISMA

2012 Work Plan final

Draft develop	ed Decem	ber 8, 2011 and	updated based on January 24, 2012 g	general membership meeting		
Goal Category	Таха	Year	Description	Action	Due Date(s)	Lead Person(s)
CISMA	all	2012	Create this year's annual work plan, scheduling 1 or 2 general HCISMA mtgs, share draft of steering committee duties and CISMA roles	Work plan draft developed during 12/8/11 meeting (present: Tabitha Biehl-Gabbard- Polk County, Chris Matson- FWC, Mike Sowinski- FWC, Erik Egensteiner- Florida Park Service, Carrie Kotal- Florida Forest Service, Katrina Noland- Bok Tower Gardens, Jackson Mosley- Florida Park Service, Cheryl Millett- The Nature Conservancy), with prior input (from: Jeanne Parks- Florida Forest Service, Samantha McGee- Polk Extension Service, Debi Tharp- The Nature Conservancy); draft will be circulated to all members for review and input; work plan edited at 1st general meeting 1/24/12 (present:Jackson Mosley- FPS, Keeli Carlton- PC, Chris Matson-FWC, Debi Tharp- TNC, Shannon McGee- IFAS, Mike Sowinski- FWC, Katrina Noland- BTG, Cheryl Millett- TNC); exotic cookbook/recipe contest- for potluck; laptop w/air card- map your invasive now	cmtee roles out 6/30: 2nd general meeting Polycom w/core CEU	CMILLETT/K EELI CARLTON- co-chairs
CISMA	all	2012	Create and publish short annual report for 2011.	Have report template from DoD Legacy	2/28/12: report	CMILLETT
CISMA	all	2011, continued	Identify partner(s) or organization(s) to serve as the recipient and administrator for grants.	Will do on case by case basis instead of identifying one lead. CHEP ed grants \$250 for near term and \$3K for next cycle, wanted for MacGyvering workshop: DIY make your own application equipment, via Tabitha Biehl/Polk County; FLEPPC not an option (Cheryl Millett asked Kristina Serbesoff-King); Shannon could get funding for projects that do for IFAS ;Trina - will keep in touch w/Green Horizon Trust as they have new leadership	2/15/2011 for info re: \$250 and \$3K deadline	TABITHA BIEHL- GABBARD, KATRINA NOLAND, SMcGEE, CMILLETT
CISMA	all	2012	Develop a list of funding programs with due dates for control, EDRR, education and other projects.	Chris Matson: FISP add public landowner matrix- Cheryl suggested to FISP and not on immediate horizon so DIY; Cheryl will ask Suncoast CISMA for their grant/funding list and ask if could be on FISP website w/link on our website ("Free # now")	40967	CMILLETT

Goal						Lead
Category	Taxa	Year	Description	Action	Due Date(s)	Person(s)
CISMA	all	2011,	Share documents allowing	Brought forward from 2010: copy Lake County CISMA approach: focus on	1/31: check	CMILLETT
		continued	public agency staff to work	"if required to allow agencies to work on parnter land" and make sure	with Rose to	
			on other	waivers/releases available on website	see if	
			agency/NGO/private lands		posted on	
			(if required to allow		FISP	
			agencies to work on		site/make	
			partner lands).		HCISMA link	
			partiter lariasy.			
CISMA	all	2012	Investigate putting on	For next general meeting. Tabitha to ask Ed Sheehan (or Shannon will ask);	2/28/2012	
			public landowner funding	Cheryl to ask Erin Myers.		BIEHL-
			workshop for invasives			GABBARD,
						SHANNON
						MCGEE,
						CHRIS
Control	.11.	2012		Charles and the control of the contr	6/20/2042	MATSON
Control	plants	2012	Annually coordinate a	Cheryl arranging treatment of cogon adjacent to APAFR on private lands	6/30/2012	CMILLETT, MIKE
			cooperative workday	and will invite partners; could be project ID'd by Charles Cook with Chinese tallow/chainsaw on Peace River (Debi suggests 10% imazapyr); Jeanne		
			focusing on priority	Parks considering site visit day at Highlands Hammock State Park (could be		SOWINSKI/ CHARLES
			control species.	combined with meeting)		COOK,
				combined with meeting)		JEANNE
						PARKS
Control	plants	2012	Annually assess and	Bring up at general meeting: skunkvine (make map and ask if should be	2/28/2012	
			update prioritized list of	EDRR or control); ask steering cmtee how to proceed	, ,, ,, , , , ,	BIEHL-
			invasive plants and	,, ,		GABBARD,C
			control techniques.			MILLETT
Control	plants	2012	Submit petitions to FDACS	Mike to plant Mexican petunia "Purple showers" to see if seeds	12/31/2012	MIKE
	·		for listing of high priority	·		SOWINSKI
			EDRR and control invasive			
			plants as noxious weeds,			
			requesting cease of sales,			
			planting, etc.			
			pianting, etc.			
		1	1		l	

Goal						Lead
Category	Taxa	Year	Description	Action	Due Date(s)	Person(s)
Control	plants	2012	Add to emphasis of top priority control species by focusing CISMA partner efforts on these at all opportunities; and increase the size of invasive managed areas on public and private conservation lands.	Surveymonkey to develop Needs list for strategic areas/species (Suncoast CISMA: what are top priorities) for Americorps or PT SCA students for work for a week across agencies; ID where \$ goes; +1 point on IPMS ranking if participate in CISMA; Mike Sowinski sent Suncoast query to Tabitha Biehl, Cheryl Millett (done), Tabitha will create questions; after reviewing Suncoast from Mike; Chris Matson will review; Cheryl Millett will create surveymonkey; Debi Tharp/Carrie Kotal for committee	6/30/2012	TABITHA BIEHL- GABBARD
Control	animals	2012	Develop a list of known invasive animals on CISMA lands (e.g. feral hogs, iguanas, Cuban tree frogs, feral cats).	Maps at general and workshop to get EDRR/animal (Tabitha will print maps on plotter); Cheryl created maps	3/1/2012	TABITHA BIEHL- GABBARD, CMILLETT
Control	plants	,	HCISMA lands and managers willing to participate in biocontrol trials inform USDA ARS, IFAS/University of Florida, and/or others about which ones of interest to this area	Cheryl has asked FDACS for help w/this; Mike Sowinski to ask Jim Cuda; Shannon McGee will keep list; Debbie Tharp to look for intern's list	4/30/2012	SHANNON MCGEE
Data	plants	2012	Biannual aerial survey completed to find Old World climbing fern infestations in remote locations to facilitate quicker treatment.	Tabitha maybe Polk- mosquito control helicopter- will pursue. Cheryl get how-to-aerial presentation to Tabitha & post on website. Stephanie Green working on helicopter survey of SWFWMD lands (completed 2/3/12). Let all know about possibility of LightHawk, Buck for Highlands, Hardee, DeSoto; Clarence Morgan looking into UAV to survey at APAFR (set for 2/17/12)	3/1/2012	TABITHA BIEHL- GABBARD, STEPHANIE GREEN, CLARENCE MORGAN

Goal						Lead
Category	Taxa	Year	Description	Action	Due Date(s)	Person(s)
Data	all		Direct research: Submit a list of questions about invasive species biology, impacts, and/or management to university biology departments, FLEPPC, FISP, chemical company representatives, or other research entities; review the progress of these questions and answers at least	Asked at general meeting; none identified at present	1/31/2012	CMILLETT
Outreach	plants		create easier source for target EDRR and control species for ID workshops. For our EDRR list- where can they be collected: For all, is there a secure location/greenhouse where potted plants can be stored for a garden of	Tabitha has old shadehouse and they can stay there. Mike Sowinski has 800 10-gal tubs. Mike to create list or Google map of his collection locations. Shannon has permit to grow, transport. Tabitha: downy rose myrtle=Crooked Lake Prairie.	4/30/2012	MIKE SOWINSKI, TABITHA BIEHL- GABBARD, SHANNON MCGEE
ED/RR	plants		Reprint EDRR ID laminated card decks and include QR code to point to treatment info online	Tabitha investigating funding possibilities for Polk County to pursue. Shannon may be able to apply for funding. Cheryl obtained cost estimate from original printer and sent to Tabitha.	6/30/2012	TABITHA BIEHL- GABBARD, SHANNON MCGEE, CMILLETT
ED/RR	plants	annually	Reassess EDRR list.	Ask for possible candidates for EDRR at each meeting; immediate thoughts: queen palm & crepe myrtle (if take over ag land that had will pop up everywhere); Chris Matson pink abrizia (jalibisia); Tabitha says someone treated kudzu in Homeland torched brown; still on 640 on cemetary properties according to Carrie Kotal	12/31/2012	?

Goal						Lead
Category	Таха	Year	Description	Action	Due Date(s)	Person(s)
ED/RR	plants		Conduct annual cooperative workdays to eradicate high priority EDRR and prevention species (newly in or adjacent to HCISMA).	Debi Tharp proposed Scleria lacustris workday. If EDRR species appears, could be good opportunity for workday. Erik Egensteiner hosted coral ardisia workday Jan. 5; McNamara easement; remove berries & bag/map; flag to spray follow-up; toxic to cattle. 2 LWRSF coral ardisia workdays completed Jan. 31 & Feb. 7. Both included partners & Ridge Rangers	12/31/2012	ERIK EGENSTEIN ER, SANDY GREER, DEBI THARP, CMILLETT.
Outreach	all		Create PPt presentation & display for events with general CISMA message & plant ID.	Cheryl will send pdf of ID/general CISMA to Carrie Kotal & outreach committee to start.	2/20/2012	
Outreach	all		Represent HCISMA at Peace River Awareness Day 4-5 grade	April- Carrie Kotal. Cheryl emailed steering committee for more info re: event on 2/9	5/1/2012	CARRIE KOTAL, CMILLETT
Outreach	all	2011	Develop a list of environmental education centers and distribute educational materials about prevention and control.	List developed by education committee 2011. need to identify materials to distribute	12/31/2012	KATRINA NOLAND, CARRIE KOTAL, SHANNON MCGEE.
Outreach	plants		Work with Cooperative Extension Master Gardener Program and local garden clubs to promote the removal of invasive plants and use of native plants.	May be put off until next year. Shannon McGee may present this if/when the general HCISMA ppt is shared (see above).	12/31/2012	SHANNON MCGEE
Outreach	plants	2011	Investigate implementation of Hitchhiker Program	Determine feasibility of working with Florida Sea Grant and other coastal partners to implement Hitchhiker Program in HCISMA and distribute outreach materials to large local marinas and at large fishing tournaments.	12/31/2012	SHANNON MCGEE

Goal						Lead
Category	Таха	Year	Description		Due Date(s)	Person(s)
Outreach	plants		Choose a short list of priority education volunteer programs for HCISMA to implement that simultaneously build up invasive volunteer programs and raise awareness (e.g., student work days, invasive survey recruitment and training programs, Pepper Busters creation, etc.)	Focus on outreach to engage college students in workdays: Chris Matson will ask Bill Parken about possibility of coordinating through Ridge Rangers; Jackson Mosley can propose work to SFCC students where he teaches ecology in the summer; Shannon McGee can forward to UF; Keeli Carlton will work with Tabitha Biehl-Gabbard to engage Southeastern Univ. plant ecology students (already have used SE students via service learning to pull natal grass)	12/31/2012	CHRIS MATSON, JACKSON MOSLEY, SHANNON MCGEE, KEELI CARLTON
Outreach	plants		Green Thumb program- keep apprised of adjacent CISMAs interested in implementing Green Thumb so that we could pursue in the future (not	Debi Tharp will keep in touch with Central Florida and Lake County CISMAs. Mike Sowinski will do same with Suncoast CISMA. Shannon McGee suggests engaging with Extension horticultural agent when we're ready to pursue.	12/31/2012	DEBI THARP, MIKE SOWINSKI
Outreach	plants		Develop 2 AlterNatives brochures, 1 for Ridge and 1 for off-Ridge.	Shannon McGee can apply for grant funding for this, including WalMart and Office Depot. Can use Lake County's brochure as starting point (Cheryl got enthusiastic okay from Wendy Poag and sent out pdf of brochure). May be good idea to engage Shannon Burgess with Bok Tower Gardens and see who she works with.	12/31/2012	SHANNON MCGEE, DEBI THARP, MIKE SOWINSKI
Outreach	plants	2012	Determine appropriate locations and install 1 or more boot scrusher/cleaner to prevent spread of invasive seeds.	Shannon McGee has investigated the boot scrusher online. Chris Matson suggested a good location for one would be scrub near a natal grass infestation site. Keeli Carlton said she could engage Eagle Scout to install as project. Suggestion to put one at Tenoroc. Katrina Noland said it's possible this could be installed through the FCT grant for Bok Tower Gardens (for knoll?).	12/31/2012	SHANNON MCGEE

Goal						Lead
Category	Таха	Year	Description	Action	Due Date(s)	Person(s)
Outreach	plants		Work with CSX employees to remove invasive plants on or adjacent to their property.	Cheryl will work on this to conduct removal day in fall 2012.	12/31/2012	CMILLETT
Outreach	animals		Work with retailers to reduce the sale of invasive animals; support and implement the "Don't Release Unwanted Pets" poster and card statewide efforts.	Ask FISP to promote pet stores to take in unwanted pets (Cheryl emailed suggestion 1/12); Jackson: list of which animal control will take which types of animals. Cheryl will do prevention outreach in coordination with FWC's Pet Amnesty program.	12/31/2012	CMILLETT, JACKSON MOSLEY
Outreach	all	2012	Investigate putting on private andowner workshop for invasives	Debi Tharp will keep apprised of Central Florida CISMA's idea to put on private landowner workshop as guided by Cattlemen's rep on their steering committee and will share with Heartland CISMA as idea for us next year.	12/31/2012	DEBI THARP
Outreach	all		Publicize mapping reports or other projects , through coordinated press releases or public awareness activities. (Annual activity)	PR for workshop, NISAW activities. Tom Palmer did come out for coral ardisia workday at LWRSF on 1/31 and took notes & photos, but haven't seen story. Cheryl will work w/TNC media to create annual workshop press release and any others are welcome to publicize any other invasive activities and let steering committee know.	12/31/2012	CMILLETT
Outreach	all		Each NISAW week (usually in January or February), share Annual Weed/Animal Reports with elected officials.	Tabitha Biehl to host invasive tour for select officials. Include info re: private landowner \$ spent on invasive treatment- Tabitha will contact Charles Cook/ Ned Waters. Shannon McGee will have water-related invasive outreach as part of Water School (Mike says include Red Root Floater).	12/31/2012	TABITHA BIEHL- GABBARD, SHANNON MCGEE
Outreach	all		Hold annual trainings for invasive species ID, including EDRR	Ridge Rangers: featured species for each workday: EDRR & involvement w/EDRR partner workdays.	12/31/2012	CMILLETT, BILL PARKEN

Goal						Lead
Category	Таха	Year	Description	Action	Due Date(s)	Person(s)
Outreach	all	2011	Evaluate and define other ways to "market" the HCISMA to its community (e.g., give presentations about HCISMA at organizational meetings/workshops, e.g.	Shannon McGee will present to landscapers trade show and asked for and received feedback about list from steering committee. Cheryl presented Heartland CISMA update/invitation to LWREWG meeting on 1/26.	3/1/2012	SHANNON MCGEE, CMILLETT
Outreach	all	Annually	Ona Pasture Weed Day). Conduct second Central Florida Invasive Species Workshop, modeled after Southwest Florida Invasive Species Workshop, with speakers about a wide range of invasive taxa and topics.	To be at Circle B March 1, 2012. Speakers lined up and flyers made by Debi Tharp for late Jan. distribution. Shannon McGee to get CEU'S for attendees. Debi Tharp organized donors to sponsor lunches for attendees. Seeking raffle prizes.	3/1/2012	DEBI THARP, TABITHA BIEHL- GABBARD, MIKE SOWINSKI, SHANNON MCGEE, KEELI CARLTON, CMILLETT
Outreach	all	Annually	Hold annual trainings for invasive species ID, including EDRR	Chris runs workshop of MacGyver and mix (when use seed oil/when water) next fall: need time to build things: 1st wk Oct/last Sept or Feb	12/31/2012	CHRIS MATSON, TABITHA BIEHL- GABBARD
Outreach	all	Annually	Hold annual trainings for invasive species ID, including EDRR	Prioritization/weed management plan workshop- propose to NATA and conduct for Heartland CISMA	12/31/2012	_
Outreach	all	Annually	ED Scavenger Hunt	Year-long contest with prizewinners announced during NISAW 2012.	3/1/2012	DEBI THARP, CMILLETT

Goal Category	Таха	Year	Description	Action	Due Date(s)	Lead Person(s)
Prevent	plants	2012	Encourage use of HCISMA decontamination guidelines by all contractors	Have decontamination language for contracts and will have decon breakout at annual workshop; rest is on hold until FISP has statewide approach in place	12/31/2012	DEBI THARP, CMILLETT
Prevent	plants	2012	If a new non-native plant is found in the HCISMA or surrounding geography, submit this incipient species through WRA.	Try with red root floater: Cheryl got AqWRA from Doria Gordon; Mike Sowinski to run it through	12/31/2012	MIKE SOWINSKI, CMILLETT
Prevent	animals	2011, continued	Set up animal invader alert systems to use to identify new animal invasions near, or at the boundaries of the HCISMA. Potential resources include EDDMapS database and other sources of new species alerts (e.g., USGS NAS database, shell collecting groups, bird boards, etc.)	Cheryl Millett: alerts of new reports in CISMA to be shared before each meeting and quarterly by email along with note how to set up for selves	12/31/2012	CMILLETT
Prevent		2011, continued	Determine timing and process for systematic review of potential new pests or pathogens.	Carrie Kotal and Shannon McGee will share updates they receive through their agencies. Cheryl to send email list to all steering committee members to be able to communicate directly with entire group. SHANNON shared info re: Giant African Snail, mgmt of Laurel Wilt Disease	12/31/2012	SHANNON MCGEE, CARRIE KOTAL

Florida Keys Invasive Species Task Force

Partners:

US Dept. of Defense,
USDA-NRCS,
Florida Dept. of Transportation,
Florida Department of Environmental
Protection,
Florida Fish and Wildlife Conservation
Commission,
Keys Energy Services
Florida Keys Electrical Cooperative

US Fish and Wildlife Service,

The Nature Conservancy,
Institute for Regional Conservation,
Friends And Volunteers Of Refuges
University of Florida IFAS Extension,
Monroe County,
City of Marathon,
Village of Islamorada,

and City of Key West

2011 Annual Report

Introduction:

The Florida Keys Invasive Exotics Task Force (Task Force) was organized in early 1996 to address the proliferation of invasive exotic plants in the Florida Keys. The mission of the Task Force is "to coordinate and increase efforts to eliminate invasive, non-native plants by combining programs and resources to develop and implement a long term exotics removal and control plan for the Florida Keys." These biological pollutants beset the Keys' unique subtropical ecosystem and the flora and fauna supported by it but a great deal of progress toward their control has been achieved.

The Task Force is composed of biologists, planners and natural resource managers from local, state and federal agencies, non-profits and public utilities. The goals of the Task Force include documentation of existing populations, prioritization and control of infestations, public education, tracking of relevant legislation and promotion of interagency cooperation. After meeting monthly for 3 years, members currently meet bimonthly to plan and update one another on current exotics control projects, education and outreach efforts, and fundraising strategies.

Task Force members are confident that the limited geographic area of the Keys, along with the group's comprehensive interagency approach and sheer determination, will result in an early and lasting victory in the war on invasive exotic plants in the state of Florida. Public conservation lands will soon become "exotics-free zones" around which ever-expanding concentric buffer areas will be addressed until the problem is solved. As the Task Force identifies and demonstrates successful strategies it is hoped that agencies, organizations and like-minded groups will learn from, and improve upon, its successes and innovations.



Task Force members at Annual Python Patrol Training

Cooperation is the key to winning the war on invasive exotic plants.

2011-2012 Steering Committee

Co-Chair	Beth Bergh,	Monroe County
Co-Chair	Janice Duquesnel	Florida Department of Environmental Protection
Steering Member	Randy Grau	Florida Fish and Wildlife Conservation Commission
Steering Member	Chad Anderson	Florida Keys National Wildlife Refuges
Steering Member	Carrie Backlund	Naval Air Station – Key West

2011 Calendar of Events/Accomplishments:

- January 21st Resource Management Project exotic removal at Curry Hammock
- January 27th Exotic removal with volunteers at Key Largo Hammock
- February 8th Keys CISMA General Meeting
- March 12th Pet Amnesty Day
- March 16th Keys CISMA EDRR Workday
- April 8th Resource Management Project exotic removal on Lignumvitae Key
- April 14th Keys CISMA General Meeting
- May 6th Coral surveys and Lionfish surveys and removal Pennekamp Park
- May 12th Keys CISMA EDRR Workday
- May 13th Lionfish surveys and removal Bahia Honda
- May 16th Lionfish surveys and removal Pennekamp Park
- June 9th Keys CISMA General Meeting
- July 7th Keys CISMA EDRR Workday
- July 7th Coral surveys and lionfish surveys and removal Pennekamp
- July 8th Coral surveys and lionfish surveys and removal Pennekamp
- July 14th Resource Management Project planting and exotic removal LV Lower Matecumbe Key parcel
- July 25th- Lionfish surveys and removal Pennekamp
- July 28th Herbicide Workshop Windley Key
- August 11th Keys CISMA General Meeting
- September 7th Lionfish surveys and removal Bahia Honda
- September 10th GreenThumb Training
- September 12th Coral surveys and lionfish surveys and removal Pennekamp
- September 28th Lionfish surveys Indian Key and Lignumvitae Key
- September 29th Lionfish surveys Ft. Taylor
- September 30th Keys CISMA Herbicide Workshop Windley Key
- October 7th- Resource Management Team Project Key Largo Hammock
- October 14th Keys CISMA Herbicide Workshop
- October 21st Keys CISMA Exotic ID Workshop
- November 10th EDRR Workday Air Potato
- December 8th Keys CISMA General Meeting

Florida Fish & Wildlife Conservation Commission – Invasives Species Program Projects

ID#	Project Name	Infested Acres	Cost
- 14 004			
FK-094	FFWCC: Wildlife Environmental Area Tech Crew	341	\$ 74,993
FK-095	Monroe County: Tech Crew	~2,000	\$ 96,000
FK-096	USFWS: Tech Crew	800	\$ 100,000
FK-097	Monroe County: Contracted Removal	7	\$ 50,000
FK-098	FDEP: North Key Largo Parks "A"	239	\$ 98,870
FK-099	FDEP: North Key Largo Parks "B"	270	\$ 99,654

U Paiks D	
(4-Gulf Stream Shores Approx 13 acres	
	Highly rank most cruci





Highly ranked local projects eradicated invasives in some of the Keys most crucial habitats, benefiting many endangered species.

Left: Dagny Johnson North Key Largo State Botanical Site, Key Largo Above, Right: National Key Deer Refuge, Big Pine Key and Cudjoe Key



Next Steps

In adoption of our 2012 Annual Workplan, the Keys CISMA is very excited to keep growing our efforts and influence:

• Prevention:

- o Complete guidance for washdown areas and get adopted at Monroe County transfer stations.
- o Continue to grow Our Animal Family to a statewide level program (poster below)
- Assist with annual FFWCC Pet Amnesty Events
- o Grow number of GreenThumb Nurseries

• Early Detection/Rapid Response:

- o Hold first ever keys ranking of invasive exotic animals.
- o Hold annual python patrol trainings
- o Hold annual plant ID trainings, focusing on Cat III species.
- o Hold 6 EDRR Workdays per year

Control:

- o Increase control cooperation along US1 corridor
- o Reach new partners with annual FWC/IMP project ranking
- o Creation of Iguana pest control FAQ's for land managers
- o Hold annual herbicide workshops

Monitoring and Mapping:

o Hold annual EDDMapS training



Bark Park Logo

Here!

Florida Keys Invasives Exotics Task Force (Or Keys CISMA)

- 2012 Work Plan General Timeline

January • West Summerland Key Workday (12th - Beth)	 February (Meeting: 9th) Approve 2012 Workplan (All) Coordinate Pet Amnesty Events (Randy/Chad) Approve Iguana Fact Sheet (Jim D) Draft Guidance of Wash Down Areas (Alison) 	 March (EDRR Workday: 8th) Pet Amnesty Day (Randy/Chad) Coordinate Woofstock (Randy/Chad) Annual DOT Corridor Mtg (Janice)
 April (Meeting: 12th) Annual FWC/IMP Project Ranking (Janice) Daily pet amnesty plan (Randy/Chad) Draft list of events for One Animal Family possibilities (Alison) Set 10 priority OAF partners to collect pledges from (Alison) FLEPPC Annual Conference (Alison) 	May (EDRR Workday: 10 th) • Air Potato EDRR Workday (Cody) • Online EDDMapS Training () • GreenThumb weblinks due (all)	 June (Meeting: 14th) Invasive Animals List Workshop (Randy/Chad) Updated animals fact sheet / poster to increase knowledge of current laws (Randy/Chad) Daily pet amnesty flyer (Randy/Chad) Tegu Presentation/Plan (Ron Rozar/Tony Pernas)
 July (EDRR Workday: 12th) Air Potato EDRR Workday (Cody) Catch up on digital reporting of sightings and treatment efforts for plants and animals (All) GreenThumb training (Alison/KimG) 	 Aug (Meeting: 9th) Contractors evaluations due (All) Confirm designated wash down areas Confirm python "holding areas" (Randy/Chad) Encourage FDACS to hold invasive plants meeting to evaluate candidates. (ALL) EDRR Plant Ranking 	Sept (Prevention Workday: 13 th) • Visit Nurseries as EDRR Workday (Alison) • Publicize Code of Conducts signees
 Oct (Meeting: 11th) Incorporate Tegu/Monitor capture training into Python training (Randy/Chad) Encourage FFWCC to evaluate and recommend control measures. (ALL) GreenThumb Effort Review (Alison) 	 Nov (EDRR Workday: 8th) Air Potato: Nov 8th (Cody) Herbicide & Exotics ID Training Courses (Janice) Hold refresher trainings for all Python Patrol responders (Randy/Chad) 	 Dec (Meeting: 13th) Set Priority EDRR species for year. (Cody/Randy/Chad) Set Dates for best control / follow up per EDRR species (Cody/Randy/Chad) Draft 2013 Work Plan