



# Florida Coastal Everglades (FCE) LTER Information Management System

2007 FCE LTER All Scientists Meeting  
March 19, 2007



Linda Powell, FCE Information Manager  
Mike Rugge, FCE Project Manager

# Outline

- Overview of last year's activities
- Data statistics
- Future plans

# Last year's activities

## ■ FCE Activities

- Information Management Advisory Committee (IMAC)
- EML (Ecological Metadata Language) update
- Website updates
- Web server – Migration from Windows to Linux

## ■ LTER Network, ILTER Activities

- Contributed data to Trends project
- LTER Information Managers Meeting and the LTER ASM in Estes Park, CO
- Linda presented the keynote at Red Mex-LTER ASM earlier this month

# Information Management Advisory Committee (IMAC)

- Reactivated after last year's ASM
- Includes 5 members:
  - FCE Internal Executive Committee (IEC) member
  - FCE Collaborator
  - FCE Student
  - FCE Technician
  - FCE Education and outreach representative
- Completed a questionnaire evaluating current website last summer
- We're currently in the process of making changes based on IMAC recommendations

# EML Update

This year, we started using XSL (Extensible Stylesheet Language) and stylesheets to make EML easier to read.

```
- <eml:eml packageId="knb-lter-knb-lter-fce 0177.1" system="knb" xsi:schemaLocation="eml://ecoinformatics.org/eml-2.0 1
http://evs.hernet.edu/cgi-bin/viewcvs.cgi/*checkout*/eml/eml-2.0 1/eml.xsd"
- <dataset id="LT_SS_Chambers_001">
- <alternateIdentifier>LT_SS_Chambers_001 </alternateIdentifier>
- <title>
Physical and Chemical Characteristics of Soil Sediments from the Shark River Slough and Taylor Slough, Everglades National Park, from
July 2000 to June 2001
</title>
- <creator>
- <individualName>
<salutation>Dr </salutation>
<givenName>Randy </givenName>
<surName>Chambers </surName>
</individualName>
<organizationName>Florida Coastal Everglades LTER Program</organizationName>
<positionName>Project Collaborator</positionName>
- <address>
<deliveryPoint>Department of Biology</deliveryPoint>
<deliveryPoint>College of William and Mary</deliveryPoint>
<city>Williamsburg</city>
<administrativeArea>VA</administrativeArea>
<postalCode>23187</postalCode>
<country>USA</country>
</address>
<phone phonetype="voice">757-221-2331</phone>
<phone phonetype="fax">757-221-5076</phone>
<electronicMailAddress>rmcham@wm.edu</electronicMailAddress>
<onlineUrl>http://www.wm.edu/environment/KeckLab.html</onlineUrl>
</creator>
- <metadataProvider>
<organizationName>Florida Coastal Everglades LTER Program</organizationName>
- <address>
<deliveryPoint>Florida International University</deliveryPoint>
<deliveryPoint> University Park</deliveryPoint>
<deliveryPoint> OE 148</deliveryPoint>
<city>Miami</city>
<administrativeArea>FL</administrativeArea>
<postalCode>33199</postalCode>
```

EML without XSL and stylesheets

Florida Coastal Everglades  
Long Term Ecological Research

This site is a member of the LTER Network. Links to other LTER Sites: [All site profiles (LTER Site Descriptions)]

Home Research Personnel Data Publications Education Meetings Maps Links

Metadata: Physical and Chemical Characteristics of Soil Sediments from the Shark River Slough and Taylor Slough, Everglades National Park, from July 2000 to June 2001

Return to the Data Set Summary Table      View this metadata as: HTML Text XML      Download this data set  
Search for FCE Data Sets      [LT\\_SS\\_Chambers\\_001.txt](#)  
(Public access, ASCII text)

**Dataset title**  
Physical and Chemical Characteristics of Soil Sediments from the Shark River Slough and Taylor Slough, Everglades National Park, from July 2000 to June 2001

**Dataset ID**  
LT\_SS\_Chambers\_001  
Research type: Long-Term

**Dataset Creator**  
Name: Dr. Randy Chambers  
Position: Project Collaborator  
Organization: Florida Coastal Everglades LTER Program  
Address: Department of Biology  
College of William and Mary  
Williamsburg, VA 23187 USA  
Phone: 757-221-2331  
Fax: 757-221-6076  
Email: rmcham@wm.edu  
URL: http://www.wm.edu/environment/KeckLab.html

**Metadata Provider**  
Organization: Florida Coastal Everglades LTER Program  
Address: Florida International University  
University Park  
OE 148  
Miami, FL 33199 USA

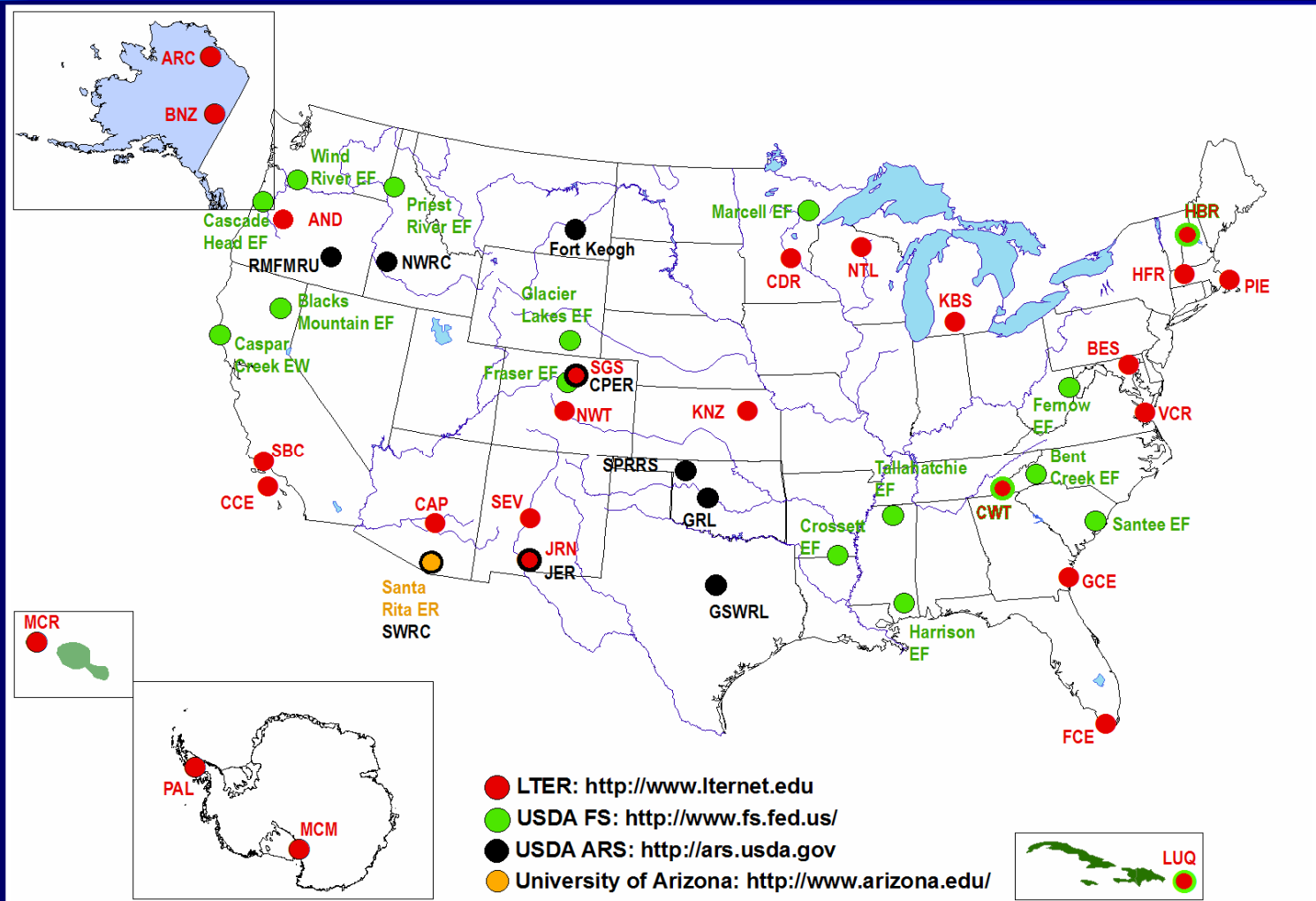
EML with XSL and stylesheets  
(HTML version – also available as text)

# Trends Project

## Trends in Long-Term Ecological Data

- Collaborative effort among agencies and institutions to make long-term ecological data easy to access, analyze, and compare across sites.
- Products
  - Book
  - Website  
<http://trends.sagehost.net/index.php>

# Trends Project - Participating Sites



# Trends Data Store Project

An example of the importance of EML for Network level synthesis

- The Trends Data Store project at LNO automates the Trends project data collection and processing steps.

## Generalized Workflow

SITE DATA



TRENDS  
WEBSITE

1. Sites collect and document time-series data (e.g., climate, social-economics, ...)
2. Sites update **EML** with a new revision
3. **EML** is harvested into Metacat
4. **EML** Loader/Parser loads new/updated dataset into primary database
5. Data integration/transformation converts "raw" data into "derived" data
6. Derived data is stored in secondary database
7. **EML** is generated for derived data and is stored in Metacat
8. Derived data is made available to Trends website

# Trends Project Website

<http://trends.sagehost.net/index.php>

## TRENDS

In long-term ecological data



[Log In](#)

### Home

- [About the Trends Project](#)
- [Datasets](#)
- [Publications & Meetings](#)
- [Contact Us](#)

### Trends Spotlight

**2006 - All  
Scientists Meeting**  
Sept. 20-23, Estes Park, CO

Trends is participating in the following ASM workshops & presentations:

LTER Information Managers Meeting: [Information management issues and the LTER Trends project: A drawing board for making cross-site comparisons feasible](#)

[LTER Graduate Student Symposium](#)

[Opportunities for Network Scale Analysis Emerging from the TRENDS Project](#)

[Hydrologic Information Systems: LTER and Observatory Information System Collaborations](#)

Friday, September 23, 2:00-3:00 pm: Opportunities for network-scale analyses emerging from the TRENDS

## The Trends Project

The Trends project is a collaborative effort among agencies and institutions to make long-term ecological data easy to access, analyze, and compare across sites. Data from Long Term Ecological Research (LTER) sites funded by the National Science Foundation (NSF), from US Department of Agriculture Forest Service (USDA FS) and Agricultural Research Service (USDA ARS) sites, and from sites operated by universities are being accumulated into a central portal for access.

This website is a portal to:

- a large and diverse collection of derived and current long-term ecological data
- unique data exploration graphing and synthesis tools
- information about our large array of collaborating agencies and their individual sites.

These data, tools and information are freely available to researchers who wish to pursue cross-site synthetic studies or students interested in learning more about resources available to them. [Please read our data use and citation policies](#) before downloading data.

In addition, the graphs found in our book, [Our Changing World: Insights From Long Term Ecological Research](#), as well as the data used to generate them, can be easily browsed and viewed here.

[Learn more about the background of the Trends project](#), or browse our site using the buttons to the left.

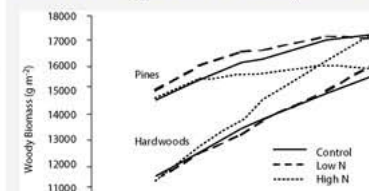


### What's New?

This website was unveiled to enthusiastic scientists and information managers at the LTER All Scientists' Meeting (ASM) September 19-24, 2006.

### Featured Dataset

Click the image below for a larger view.



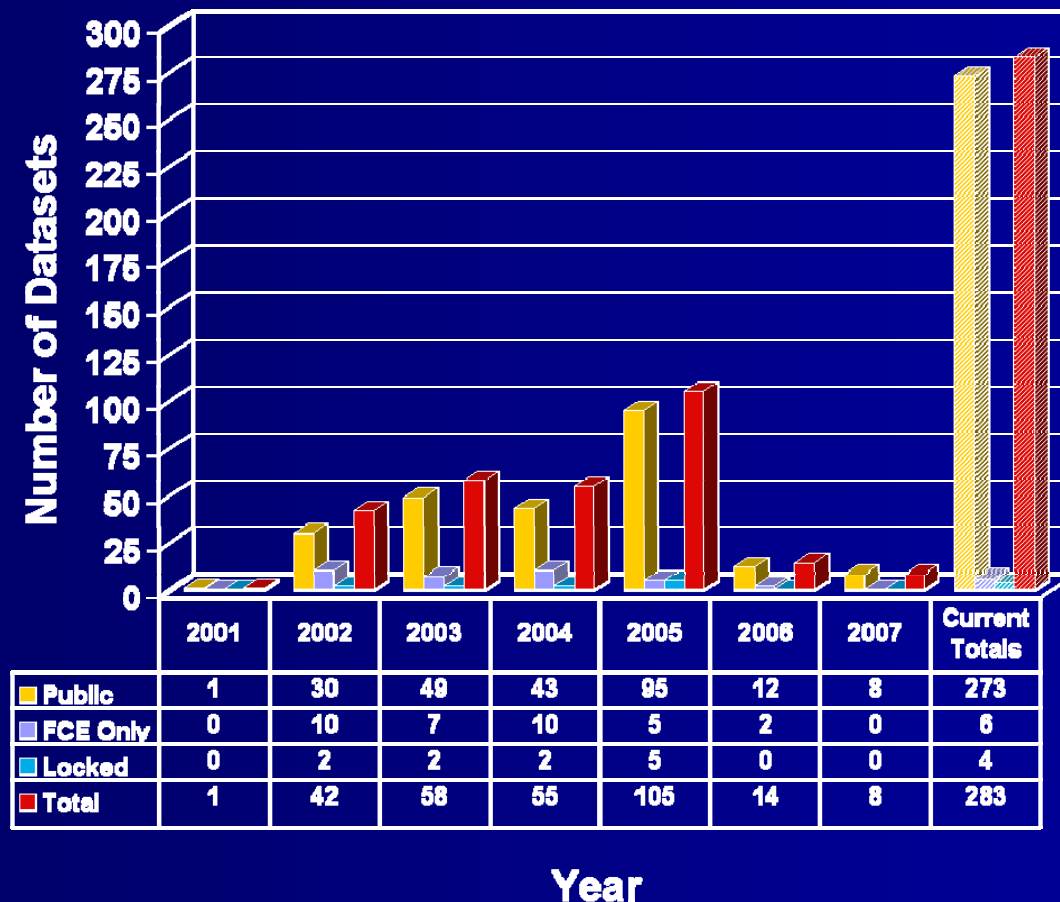
# Outline

- Overview of last year's activities
- **Data statistics**
- Future plans

# FCE Data Statistics

[http://fcelter.fiu.edu/research/information\\_management/statistics/](http://fcelter.fiu.edu/research/information_management/statistics/)

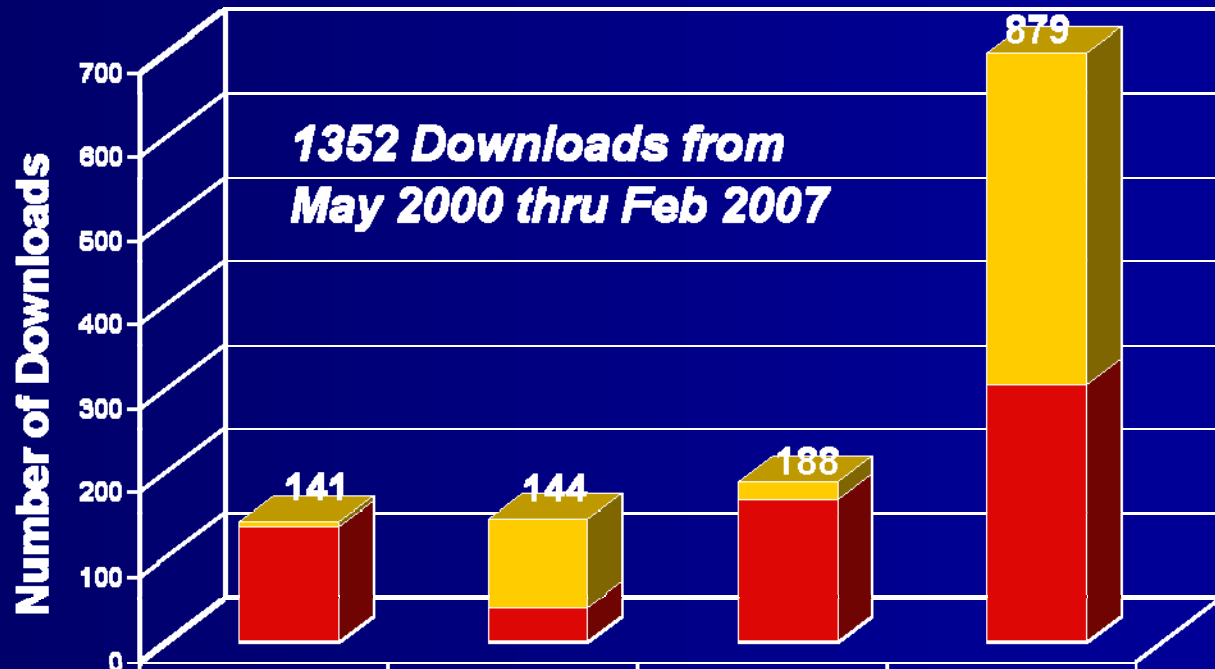
**Data Archive Annual Contributions  
Thru February 2007**



# FCE Data Statistics

[http://fcelter.fiu.edu/research/information\\_management/statistics/](http://fcelter.fiu.edu/research/information_management/statistics/)

## Cumulative FCE Data Downloads



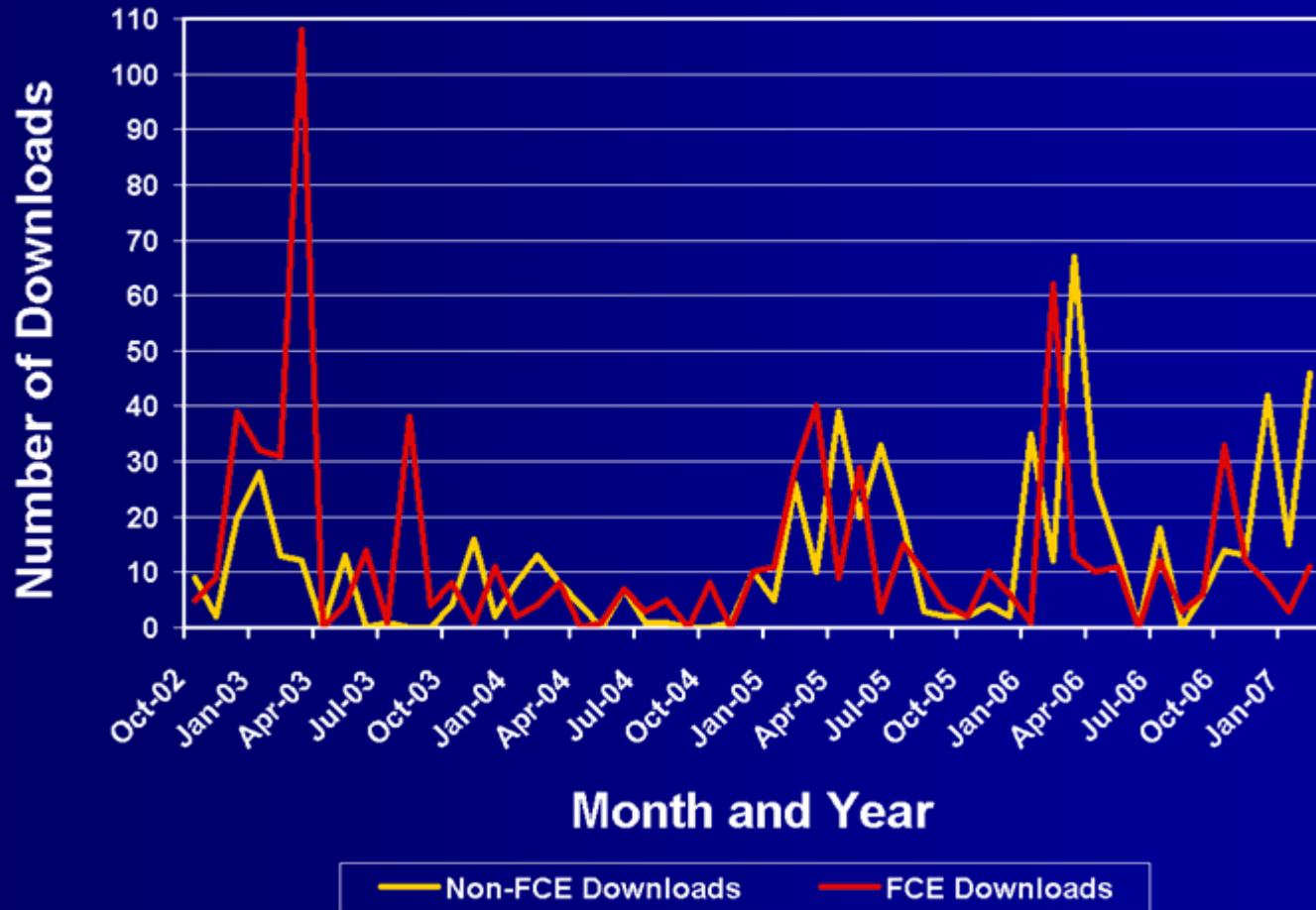
	Education (K-12)	Government Research	Other Research	University Research
<b>FCE Downloads</b>	6	104	21	575
<b>Non-FCE Downloads</b>	135	40	167	304

**Purpose**

# FCE Data Statistics

[http://fcelter.fiu.edu/research/information\\_management/statistics/](http://fcelter.fiu.edu/research/information_management/statistics/)

Temporal Distributions of FCE Data Downloads  
from October 2002 to February 2007



# FCE Data Statistics

[http://fcelter.fiu.edu/research/information\\_management/statistics/](http://fcelter.fiu.edu/research/information_management/statistics/)

Data requests via Internet to the FCE LTER Data Catalog  
May 2000 through February 2007

279 FCE Online Datasets Sorted by Type	FCE Data Download Purpose								
	UR (FCE)	UR (Other)	K-12 (FCE)	K-12	GR (FCE)	GR	Other (FCE)	Other	Type Totals
Primary Production (62)	112	58	0	45	25	7	6	54	307
Nutrients & DOM (71)	250	86	4	23	44	23	7	58	495
Trophic Dynamics (23)	14	16	0	4	6	0	0	0	40
Soils & Sediments (21)	81	29	0	8	12	3	3	20	156
Abiotic Factors (57)	109	88	1	28	17	2	5	23	273
Climate (45)	9	27	1	27	0	5	0	12	81
<i>Download Purpose Totals</i>	575	304	6	135	104	40	21	167	1352

( ) - Total Number of Datasets per Type

UR (FCE) = FCE LTER University Research

UR (Other) = Other US Colleges and Universities Research

K-12 = Primary and Secondary Educational Institution

GR (FCE) = FCE Researchers affiliated with US Federal, State, City Governmental Agencies

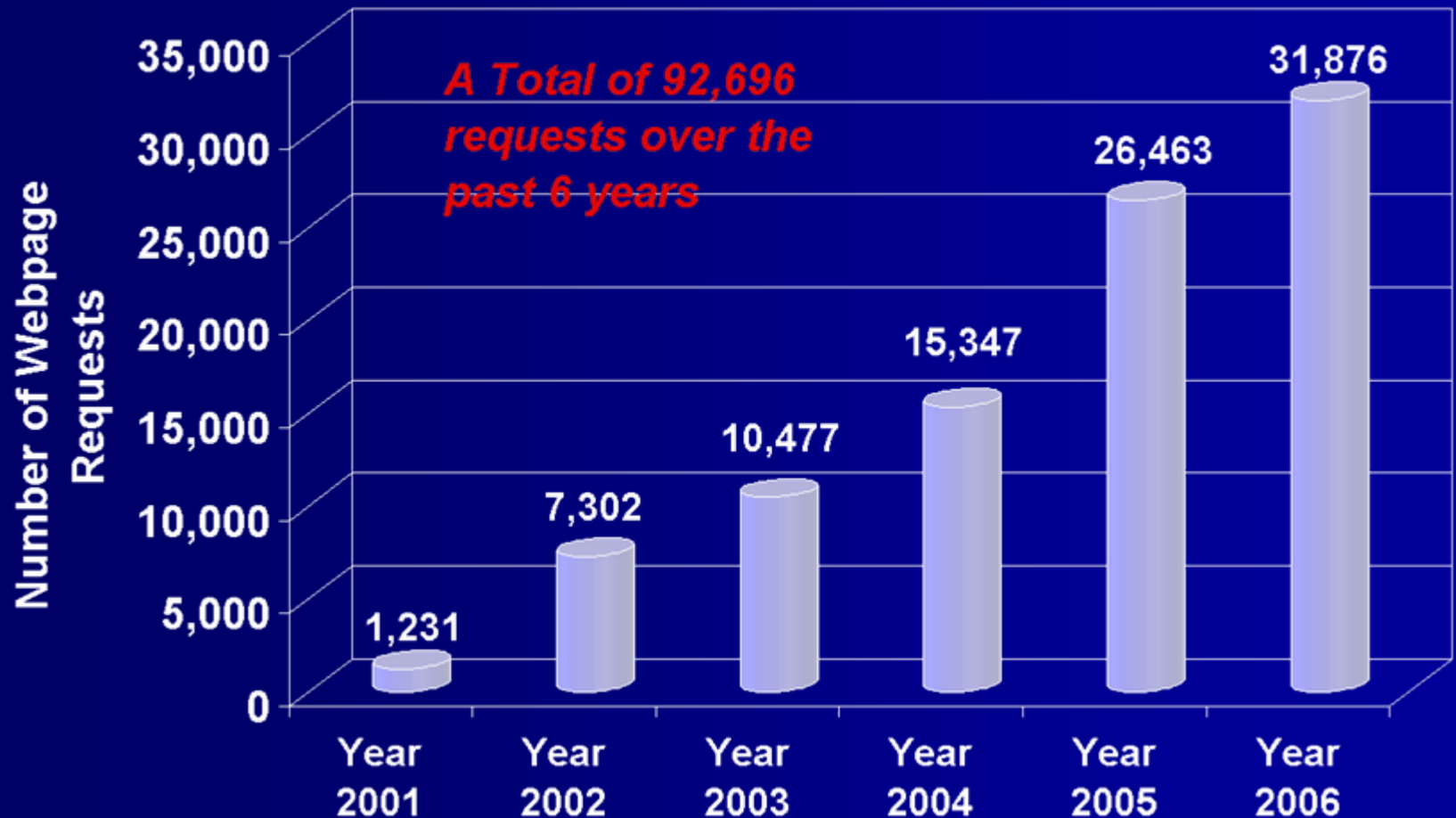
GR = US Federal, State, City Governmental Agencies

Other = Business, Not-for-Profit, etc.

# FCE Data Statistics

[http://fcelter.fiu.edu/research/information\\_management/statistics/](http://fcelter.fiu.edu/research/information_management/statistics/)

## FCE Data Webpage Request Totals



# Outline

- Overview of last year's activities
- Data statistics
- **Future plans**

# Future plans

- Gather project information for FCE II
  - New project form
- Changes to the website based on IMAC recommendations
- Forums
  - A tool for facilitating communication within and between working groups?

# Website changes

- Major goals:
  - Make information more accessible to the public
  - Make information more accessible to FCE researchers
  - Include FCE II and FCE I information
- Still need some working group abstracts for FCE II

# Florida Coastal Everglades Long Term Ecological Research



- About us
- Research
- Data
- Publications
- Student Organization
- Schoolyard
- Intranet

- What we do
- News & Announcements
- Meetings
- Personnel
- Photos
- Facilities
- About the Everglades
- Contact us

Search this website  Links to other LTER sites:

### News and Announcements

#### 2007 FCE All Scientists Meeting

The 2007 FCE All Scientists Meeting will be held March 19-20 at Fairchild Tropical Botanic Garden. Please register if you plan to attend.

#### FCE Student Organization

Next meeting: Ice Skating - December 7, 2006, 7:30-10:00pm at Kendall Ice Skating Arena



Click to view the animated map (370KB)

The Florida Coastal Everglades (FCE) LTER Program is part of the Long Term Ecological Research (LTER) Network established by the National Science Foundation in 1980. The LTER Network supports research on long-term ecological phenomena and is a collaborative effort involving more than 1800 scientists and students affiliated with 26 unique research sites. The Florida Coastal Everglades (FCE) LTER Program was established in May of 2000 and is located in south Florida, where a rapidly growing human population of over 6 million people lives in close proximity to - and in surprising dependence upon - the Florida Everglades. The FCE LTER program is based at Florida International University and includes over 50 senior scientists and 40 students from 16 institutions.

#### FCE Research Sites

The FCE LTER program's research sites are located in Everglades National Park, the southern portion of the greater Everglades ecosystem which extends north to Lake Okeechobee and the Kissimmee River. More specifically, the FCE sites occur along transects oriented with the natural flow of water in Everglades National Park's two main drainage basins: Shark River Slough and Taylor Slough.

#### FCE Research Focus

Our research focuses on an area where freshwater and estuarine vegetation mix, an area termed the "oligohaline ecotone". Oligohaline means that the water found in this ecotone, also known as a transition zone, is very low in salinity (brackish). FCE researchers study how hydrology, climate, and human activities affect ecosystem and population dynamics in the ecotone and more broadly, the Florida Coastal Everglades.

#### Quick Links

- Site Map - An outline of this web site
- FCE All Scientists Meetings
- Working Groups
- Data
- Photos
- Forums
- FCE Student Organization



#### Featured Movies



**Airboat Ride with a FCE Scientist**  
Broadband medium (2.1MB)  
Broadband high (5.5MB)



**Photos from the Field:  
FCE LTER Researchers**  
Broadband low/Dial-up (1.7MB)  
Broadband medium (2.8MB)  
Broadband high (7.7MB)



**Photos from the Field:  
FCE LTER Flora and Fauna**  
Broadband low/Dial-up (1.5MB)  
Broadband medium (2.3MB)  
Broadband high (6.3MB)



#### Featured Working Group

##### Primary Production

**What are we studying?**  
We are measuring the production of the dominant plants (sawgrass, periphyton, mangroves, and seagrass) along our two freshwater to marine transects. We are relating primary production to water flow, salinity and availability of nutrients.

##### Primary Production Working Group Photos



Sawgrass

- Click on the links below to view the photos.
1. Sawgrass
  2. Measuring sawgrass
  3. Periphyton mat
  4. Periphytometer
  5. Mangroves, Taylor Slough
  6. Mangroves, Shark River Slough
  7. Seagrass
  8. Sampling seagrass

More information about the Primary Production Working Group



# Florida Coastal Everglades

## Long Term Ecological Research


[About us](#)
[Research](#)
[Data](#)
[Publications](#)
[Student Organization](#)
[Schoolyard](#)
[Intranet](#)
[What we do](#)
[News & Announcements](#)
[Meetings](#)
[Personnel](#)
[Photos](#)
[Facilities](#)
[About the Everglades](#)
[Contact us](#)
 Search this website

Links to other LTER sites:



### Meetings

#### Meetings - Overview

[2007 FCE All Scientists Meeting](#)
[2006 FCE All Scientists Meeting](#)
[2005 FCE All Scientists Meeting](#)
[2004 FCE All Scientists Meeting](#)
[2003 FCE All Scientists Meeting](#)
[2002 FCE All Scientists Meeting](#)

### FCE All Scientists Meetings

The Florida Coastal Everglades (FCE) holds All Scientists Meetings every year, usually during March. The FCE All Scientist Meetings give FCE personnel an opportunity to present research results from the past year and discuss ideas for future research. Although subgroups of FCE meet throughout the year, the All Scientists Meeting is usually the only opportunity for everyone from FCE (including out-of-state collaborators, students, and our outside advisors) to get together during the year.



2004 FCE All Scientists Meeting Group Photo

### FCE All Scientists Meetings at a Glance



Student Lunch Meeting at the 2006 FCE All Scientists Meeting



Breakout group at the 2005 FCE All Scientists Meeting



#### 2007 FCE All Scientists Meeting

March 19-20, 2007

Fairchild Tropical Botanic Garden, Coral Gables, Florida

Theme: Launching FCE II

Objectives:

1. Enhancing research integration across Working Groups
2. Coordinating field research across Working Groups
3. Sharing results and insights across Working Groups

#### 2006 FCE All Scientists Meeting

March 20-21, 2006

Fairchild Tropical Botanic Garden, Coral Gables, Florida

- ◆ Discussions of FCE II hypotheses
- ◆ FCE Student Organization meeting
- ◆ Poster session
- ◆ IEC meeting

#### 2005 FCE All Scientists Meeting

March 25-26, 2005

Fairchild Tropical Botanic Garden, Coral Gables, Florida

- ◆ Discussions of the FCE II central theme
- ◆ FCE Student Organization meeting
- ◆ Poster sessions

#### 2004 FCE All Scientists Meeting

March 25-26, 2004

Fairchild Tropical Botanic Garden, Coral Gables, Florida

- ◆ Presentations from each working group
- ◆ FCE Student Organization meeting
- ◆ Poster session

# Florida Coastal Everglades

## Long Term Ecological Research


[About us](#)
[Research](#)
[Data](#)
[Publications](#)
[Student Organization](#)
[Schoolyard](#)
[Intranet](#)
[What we do](#)
[News & Announcements](#)
[Meetings](#)
[Personnel](#)
[Photos](#)
[Facilities](#)
[About the Everglades](#)
[Contact us](#)
 Search this website


Links to other LTER sites:



### Personnel

[Personnel lists](#)
[Researcher profiles](#)
[E-mail lists](#)
[Project Administration](#)
[Invitation to Participate](#)
[Responsibilities](#)
[Affiliated Insitutions](#)

### Researcher profile - Rudolf Jaffe

Select another researcher:


[Profile](#)
[Projects](#)
[Datasets](#)
[Publications](#)

FCE LTER Site Role(s):  
Principal Investigator

FCE Working groups:  
Nutrients and DOM  
Soils and Sediments  
Education and Outreach

Other professional positions:  
Co-Principal Investigator of FCE LTER Program, Director of the Southeast Environmental Research Center at Florida International University, Professor of Chemistry, Department of Chemistry, Florida International University.

Affiliations:  
Florida International University - Department of Chemistry & Biochemistry  
Florida International University - Southeast Environmental Research Center

Links:  
Curriculum vita

Research specialty: Analytical/environmental chemistry; organic geochemistry; biogeochemistry; application of biomarker analysis in determining the origin, fate and transport of organic matter in tropical and subtropical aquatic environments.

Mailing address:  
Southeast Environmental Research Center  
Florida International University  
University Park, OE 148  
Miami, FL 33199

E-mail: [jaffer@fiu.edu](mailto:jaffer@fiu.edu)  
Phone 1: (305) 348-2456  
Phone 2: (305) 348-3118  
Fax: (305) 348-4096



# Florida Coastal Everglades

## Long Term Ecological Research



- About us
- Research
- Data
- Publications
- Student Organization
- Schoolyard
- Intranet

- What we do
- News & Announcements
- Meetings
- Personnel
- Photos
- Facilities
- About the Everglades
- Contact us

- About the Everglades**
- Introduction ▶
- General Information
- History & Culture
- Nature & Science
- Environmental Issues & Restoration

## The Florida Everglades

The Florida Everglades are subtropical wetlands located in the southern portion of the state of Florida, extending from Lake Okeechobee on the north to Florida Bay on the south and was once bordered by Big Cypress Swamp on the west and the Atlantic Coastal Ridge on the east. A rapidly growing South Florida human population of over 6 million people lives in close proximity to - and in surprising dependence upon - the Florida Everglades. The Everglades ecosystem not only contributes to South Florida's water supply, flood control, and recreation, but serves as the habitat for diverse species of wildlife and plant life.

**We invite you to learn more about the Everglades by exploring the following links categorized by General Information, History and Culture, Nature and Science, & Environmental Issues and Restoration:**

Everglades  
General  
Information

Everglades  
Nature &  
Science

Everglades  
History &  
Culture

Everglades  
Issues &  
Restoration

*Historical Photos from the 'Reclaiming the Everglades' collection, courtesy of the Historical Museum of Southern Florida.*

# Forums

Would forums facilitate communication within and between working groups?

Florida Coastal Everglades LTER Forums :: Index - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://fcelter.fiu.edu/forum/

Getting Started Latest Headlines Sign out

## Florida Coastal Everglades LTER Forums

Forums for FCE personnel

[FAQ](#) [Search](#) [Memberlist](#) [Usergroups](#)  
[Profile](#) [Log in to check your private messages](#) [Log in](#)

Access to the forums is restricted to Florida Coastal Everglades LTER personnel. Please log in to view the forums.  
[Log in](#)

The time now is Fri Mar 16, 2007 6:22 pm

### Florida Coastal Everglades LTER Forums Forum Index

[View unanswered posts](#)

Forum	Topics	Posts	Last Post
<b>Announcements</b>			
<b>News and Announcements</b> FCE LTER News and Announcements Moderators: <a href="#">ruqqem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	0	0	No Posts
<b>Job announcements</b> Job announcements Moderators: <a href="#">ruqqem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	0	0	No Posts
<b>Meeting announcements</b> Meeting announcements Moderators: <a href="#">ruqqem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	1	1	Mon Oct 30, 2006 1:59 pm <a href="#">ruqqem</a> →

Mark all forums read

[Log in](#)

Username:  Password:  Log me on automatically each visit

New posts No new posts Forum is locked

Powered by phpBB © 2001, 2005 phpBB Group



# Florida Coastal Everglades LTER Forums

Forums for FCE personnel

[FAQ](#)
[Search](#)
[Memberlist](#)
[Usergroups](#)  
[Profile](#)
[You have no new messages](#)
[Log out \[ ruggem \]](#)

Access to the forums is restricted to Florida Coastal Everglades LTER personnel. Please log in to view the forums.

[Log out \[ ruggem \]](#)

You last visited on 12 Mar 2007 11:22

The time now is 16 Mar 2007 18:40

[Florida Coastal Everglades LTER Forums Forum Index](#)

[View posts since last visit](#)

[View your posts](#)

[View unanswered posts](#)

Forum	Topics	Posts	Last Post
<b>Announcements</b>			
<b>News and Announcements</b> FCE LTER News and Announcements Moderators <a href="#">ruggem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	0	0	No Posts
<b>Job announcements</b> Job announcements Moderators <a href="#">ruggem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	0	0	No Posts
<b>Meeting announcements</b> Meeting announcements Moderators <a href="#">ruggem</a> , <a href="#">childers</a> , <a href="#">qaisere</a>	1	1	30 Oct 2006 13:59 <a href="#">ruggem</a> →
<b>FCE LTER Student Organization</b>			
<b>General discussion</b> FCE LTER Student Group - General discussion Moderator <a href="#">wozniak</a>	0	0	No Posts
<b>Committees</b>			
<b>IMAC (Information Management Advisory Committee)</b> Forum for the IMAC (Information Management Advisory Committee) Moderators <a href="#">ruggem</a> , <a href="#">powell</a>	0	0	No Posts
<b>Working Groups &amp; Cross-Cutting Themes</b>			
<b>Hydrology</b> Forum for the Hydrology Working Group Moderators <a href="#">pricer</a> , <a href="#">venqe1</a>	0	0	No Posts
<b>Primary Production</b> Forum for the Primary Production Working Group Moderators <a href="#">fourqure</a> , <a href="#">qaisere</a>	0	0	No Posts
<b>Trophic Interactions</b> Forum for the Trophic Interactions Working Group Moderators <a href="#">trexlenj</a> , <a href="#">heithaus</a>	0	0	No Posts
<b>Nutrient Cycling/Microbial Dynamics</b> Forum for the Nutrient Cycling/Microbial Dynamics Working Group Moderators <a href="#">boveri</a> , <a href="#">hartleva</a>	0	0	No Posts
<b>Organic Matter/Soil Dynamics</b> Forum for the Organic Matter/Soil Dynamics Working Group Moderators <a href="#">jaffer</a> , <a href="#">rmcham</a>	0	0	No Posts
<b>Human Factors and Ecosystem Services</b> Forum for the Human Factors and Ecosystem Services Cross-Cutting Group Moderator <a href="#">oqdenl</a>	0	0	No Posts
<b>Modeling and Synthesis</b> Forum for the Modeling and Synthesis Cross-Cutting Group	0	0	No Posts