



REEFS FOR THE FUTURE



Outcomes Overview for the



Friday, August 29, 2008

Richard Dodge, Chair Local Organizing Committee



Update: 11th ICRS -

July 7-11, 2008



- Keystone event in IYOR08
- Co-Hosts of 11th ICRS:

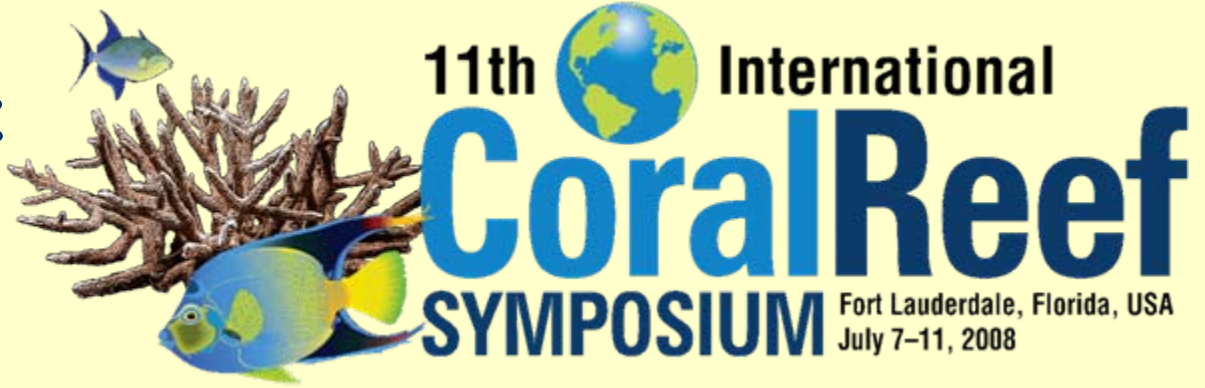


- World's foremost coral reef Science meeting
- Held every 4 years;
- Last on US mainland in 1977

• Brought together a host of international scientists, managers, conservationists, NGOs, & students from many countries !



Programmatic Features:



- Built on Excellence of 10 Prior Symposia
- Communication of Reef Science, Caribbean Coral Reef Conservation, & Management

• Education & Outreach

• Media Facilitation



• Release: Status US Reefs

• Green Meeting!



• Proceedings:

Peer, Timely, CD, Hard Copy



Ecumenical &
Encompassing
Science Program



11th  International
Coral Reef
SYMPOSIUM Fort Lauderdale, Florida, USA
July 7-11, 2008

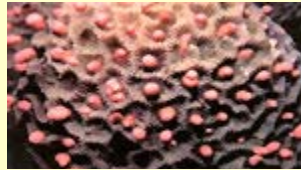
- Theme: REEFS FOR THE FUTURE
- What is happening NOW contributes to the future of coral reefs
- Question-driven mini-symposia
- Global (not parochial) in scope
- Provocative topics

Sea Surface Temperature (°C)

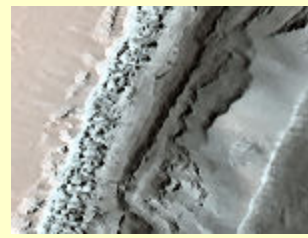
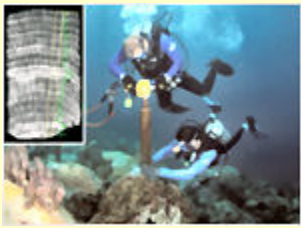


26 Mini-Symposia+

- Lessons from the Past
- Calcification-Past/Future
- Environmental Change
- Biology: corals/Symbiosis
- Ecological/Evolutionary Genomics
- Diseases
- Microbial Interactions
- Chemical Ecology
- Ecological Processes
- Reproductive Timing Regulation



- Reef Resilience
- Shifting Baselines
- Conservation
- Connectivity
- Monitoring and Assessment
- Status/Trends
- Modeling
- Social-ecological Fisheries
- Management
- Restoration
- Climate Change
- 3 SPECIALS



Some Numbers



- 75 Countries represented
- 3,500 registrants, exhibitors, press, public
- 1,032 Oral Presentations
- 1,600 Posters
- 6 Plenary Speakers
- Darwin Award & ISRS Address
- Special Guests
- \$155K Awarded in Scholarships
- 40 Exhibits & Education Center
- Many associated Meetings & Workshops, e.g., ICRI



16 Exceptional Field Trips

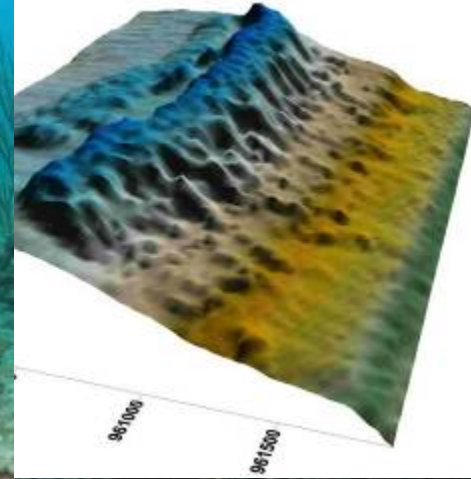


Diverse Locations

Atlantic, Caribbean
Meso-America, Florida

Multiple Types

Barrier, Bank, Atolls
Fringing, Patch
Living & Fossil



Models for sustainable conservation & management

Pre- and Post Symposium

• \$20K in Scholarships



Notable Legislators

Florida Governor
Charlie Crist



US Congressman
Ron Klein



US Congressman
Bryan Baird



Notable Speakers

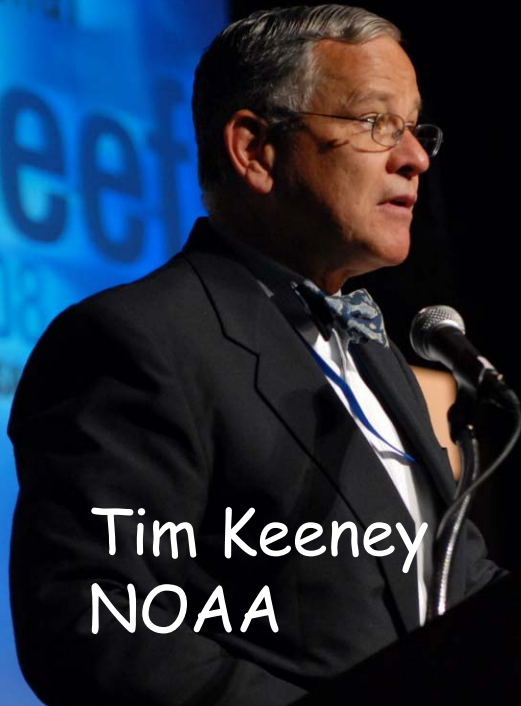
Kameron Onley
DOI



Mike Sole
FL DEP



Tim Keeney
NOAA





Exhibits, Education, & Outreach



THE CANADIAN PRESS



UPI.com
100 YEARS OF JOURNALISTIC EXCELLENCE



Media Coverage



Los Angeles Times

The New York Times



- **90 journalists; 550web/print, 100TV**
- **Press:** Associated Press, Reuters, Bloomberg, AFP, UPI, the LA Times, The Guardian, Washington Post, USA Today, The Independent, Nature, Science, New Scientist, Time, NPR, ABC Radio Australia, and NBC Nightly News, etc
- **Stories in:** US, UK, Puerto Rico, Australia, New Zealand, India, Fiji, the Philippines, Caymans, Canada, South Africa, France, Germany, Malaysia, Antigua & Barbuda, Thailand, Bangladesh, Tuvalu, Tonga, Thailand, Bangladesh, Kenya, Papua New Guinea, Japan

MALAYSIA SUN



THE FIJI TIMES

REUTERS India

The Royal Gazette

Fiji Daily Post

TIME

IN PARTNERSHIP WITH
CN

USA TODAY



Special Guest Appearance on his 199th Birthday

Charles Darwin



11th International
Coral Reef
SYMPOSIUM

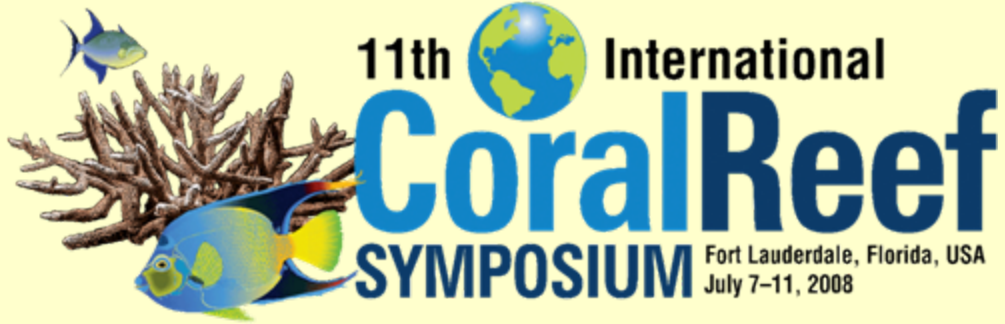


Closing Celebration



Closing Celebration





Keystone

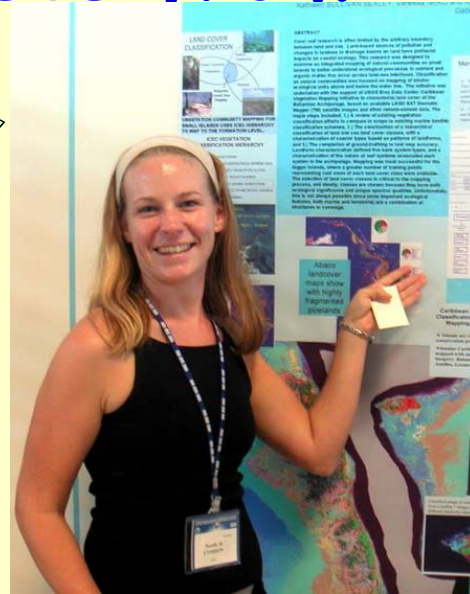


62 SPONSORS !

11th ICRS well worth the cost for contributions to Science, Conservation, & Management of Coral Reefs.

REVENUE to meet Expenses from:

- 45% Registrations
- 25% Federal
- 10% State of Florida
- 20% Donors & Foundations



SPONSORS

The 11th ICRS gratefully acknowledges the generosity of our many sponsors. We thank you for your contributions.



11TH ICRS Co-Sponsors



the David & Lucile **Packard**
FOUNDATION



Barrier Reef Sponsors

The
Herbert W. Hoover
Foundation



Healthy Reefs
For Healthy People

Atoll Sponsors



Fringing Reef Sponsors



Patch Reef Sponsors



Coral Colony Sponsors



Polyp Sponsors





Outcomes Overview



- Outcomes Still Emerging
- More Clarity after Proceedings
- Olympic Metaphor:
- Closing Session offered Major Highlights



Super Chairs & Super Themes; Attempt at Broad Synthesis

Chuck Birkeland: State and Processes

MS9 Chemical ecology; MS10 Ecological processes; MS12 Resilience; MS16 Ecosystem assessment; MS17 Remote Sensing; MS18 Status & trends; MS19 Biogeochemical; MS20 Modeling



- Not all bad news
- Reefs better far from us
- Resiliency & Adaptations evident: hot water induced anti-toxicants
- Corals taking on other partners under stress
- Protect not only beautiful reefs, but also marginal reefs which are stress adapted
- Canary in Coral Mind is dead
Signal has been given

Joan Kleypas

Past, Present, & Future Calcification

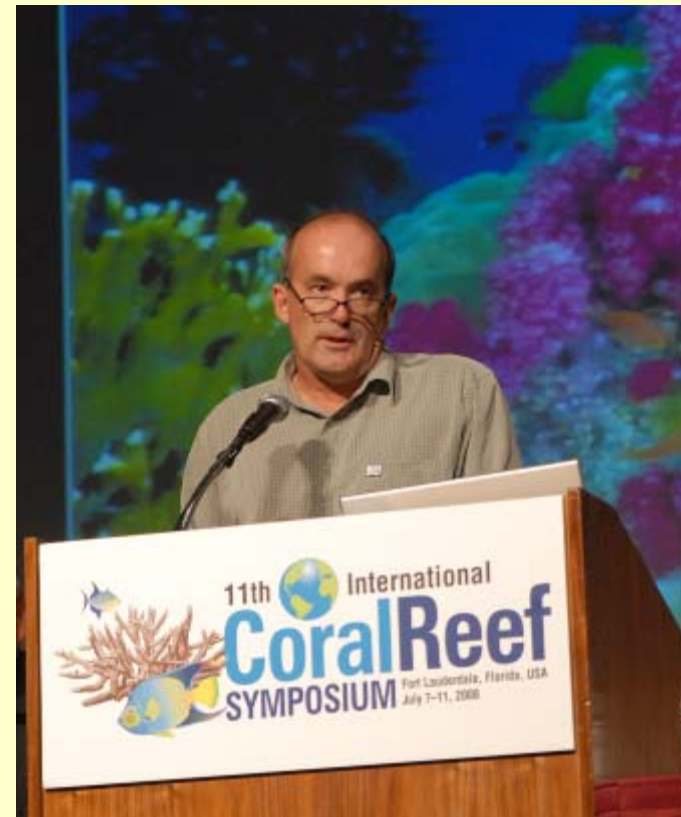
MS1 Lessons from past; MS2 Indo-Pacific coral reefs; MS3 Calcification; MS4 Recorders



- Awakening of OA importance
- Will cause slowdown in growth of corals and coralline algae
- Reduction of larvae to successfully settle & grow
- Undesirable species
- Massive species now decreasing growth from a combination of warming, water quality, OA
- Less cement =reefs with high OA
- Need a better picture
- We don't know what to do about OA other than reduce it
- Need to bolster reef health
- Better protect areas w/potential
- Promote resilience

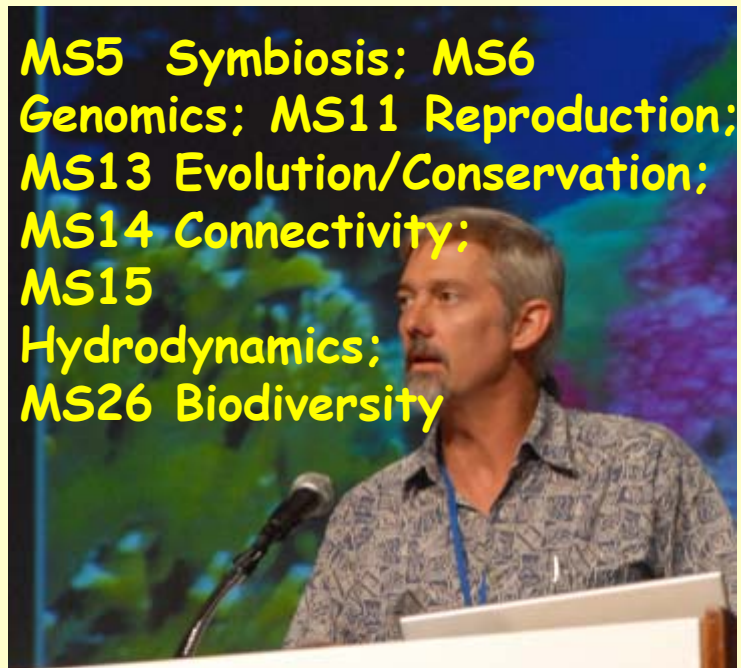
Ove Hoegh-Guldberg
Thermal Stress,
Disease, & Climate
Change: MS25 Climate
change; MS7 Disease; MS8
Microbial Interaction

- 50 papers on climate effects
- Tropical oceans warming faster
- Must reduce CO₂ emissions
- Rapid molecular advances reveals hundreds of associates: fixers of nitrogen, involved in sulfur cycle
- Corals susceptible to stress and breakdown of health
- Links between coral disease and climate change; Virus implications
- Strong association between loss of fish and loss of coral cover
- News sobering



Steve Palumbi

Genomics, connectivity, & conservation



MS5 Symbiosis; MS6
Genomics; MS11 Reproduction;
MS13 Evolution/Conservation;
MS14 Connectivity;
MS15
Hydrodynamics;
MS26 Biodiversity



- Corals make own sunscreen
- Regulation of their genes
- Genomic tools look at coral physiology
- Communication during reproduction, pillow talk
- Stress tolerant symbionts
- Neighborhoods of reefs far smaller than we thought
- Good news in that smaller scale can be managed locally
- Need to solve our CO₂ addiction & return to environmental sobriety
- In the next 50-100 years, **REDUCE** coral stress

Marea Hatzios

Reef Management & Society

MS21 Social-ecological; MS22 Fisheries; MS23 Management; MS Restoration



- **Management: Largest of the 26 Mini-Symposium**
- **Departure from pure science => Human Dimension**
- **Use social science to address direct & indirect threats**
- **Modeling helps managers**
- **No longer can we afford to ignore population growth**
- **Local action is key to environmental success**
- **Healthy reefs for Healthy People**
- **Reef Restoration useful to kick start recovery**
- **Scientists can & should become better advocates**

SYNOPSIS



To give reefs a chance, we need effective:

- Management
- Interdisciplinary Sci.
- Stakeholder buy-in
- Local, regional, national, global scales

• News far from encouraging.

• => Fever temperatures; sour oceans; rapid climate chg

• => No special silver bullet

• => Urgent action is needed to reduce CO2 emissions.

• => We Should Not Despair; We Can Buy Time

• Ecosystems respond to protection & stress reduction

TIME TO ACT IS NOW.

More Outcomes

- YOUR COLLECTIVE WISDOM
- PROCEEDINGS: Orals & Posters (peer-reviewed) in process, Oct 15, 2008 submission deadline
- Hard Copy & CD/DVD
- Reefbase / ISRS

PLEASE JOIN US IN THE CALL FOR ACTION

- Please sign the Petition at:

• <http://www.thepetitionsite.com/1/11th-international-coral-reef-symposium-call-to-action>

Letter to Science



See your Briefing Books for Outcomes & Call

Thank you for your Support



11th International
Coral Reef
SYMPOSIUM 2008
FORT LAUDERDALE • FLORIDA • USA



CRTF

U.S. Coral Reef Task Force

www.nova.edu/ncri/11icrs

