

Southeast Florida Coral Reef Initiative

Awareness & Appreciation Project # 6

Coral Reefs and Sustainable Marine Recreation Workshop Series

FINAL REPORT

Presented to the Florida Department of Environmental Protection

The Coral Reef Alliance (CORAL)

Summary

This project engaged Florida marine tourism operators, resource managers and interested members of the public in a forum to explore and discuss sustainable marine recreation. With the assistance of the Awareness and Appreciation Committee Coordinator and other SEFCRI Team Members, CORAL planned, recruited, and facilitated a total of three (3) interactive workshops that provided Florida marine tourism professionals that operate in Miami-Dade, Broward, Palm Beach, and Martin Counties an understanding of:

- The emerging issues in tourism and coral reef conservation
- The science and conservation of coral reefs in Florida and world-wide
- The strategies to incorporate best environmental business practices and international lessons learned into their business and
- How to turn conservation into a marketing tool to improve profitability

The workshops were offered free of charge and provided a forum for marine tourism operators and staff an opportunity to not only learn and express concerns about coral reef issues, but to consider practical solutions to current problems.

CORAL, with assistance from its SEFCRI partners, targeted a broad sector of Florida's marine recreation and tourism providers in the four-county region. Dive operators, divemasters, snorkel guides, nature-watch tour operators, boat rental companies, sailing charters, boat captains, kayak guides, and anyone with an interest in ocean tourism and coral reef conservation were welcomed to participate in

this initiative. Through a combination of print, phone and face-to-face marketing, we attempted to identify and recruit participants. In addition to this grassroots marketing and outreach, CORAL worked with other dive industry partners including the Diving Equipment & Marketing Association (DEMA), *Dive Training* magazine and the National Association of Underwater Instructors (NAUI) to provide deeper advertising and market penetration to dive and snorkel operators in the region.

Conjointly with the recruitment and marketing efforts, CORAL established the workshop dates, times and locations. Initially, the workshops were to be conducted in spring, but this was a busy time for tourism operators. As a result, the programs were scheduled to take place in the period from May 3 to May 11, 2006. As incentive to attend the lectures, attendees received a 300-page Resource Guide, PowerPoint presentations and a certificate of completion.

While we projected a total of approximately 60 workshop attendees at the three programs, we had a turn out of 38 total attendees. Nonetheless, this number represented a wide spectrum of stakeholders. While the number of attendees was below expectation, the group represented a far more diverse audience than in workshops CORAL has presented elsewhere.

The three workshops were presented in varying formats (weekday, weekend and evening) to provide the widest accommodation of participants' schedules. Based on this experience, it appeared that the two-evening schedule was the most successful; and it is recommended that this be the format used for future workshops targeting this audience.

In addition to the standard CORAL curriculum, each workshop addressed local issues through guest presentations by local resource managers or other experts. This local perspective was then used to enhance discussions of local concerns, and compare the threats and challenges faced by the coral reefs of Southeast Florida with those from around the world. The result was that participants came away with not only a boarder understanding of the problems confronting local reefs, but also how these issues were either similar to or diverged from global problems facing coral reefs.

Interactive sessions during each workshops enabled participants to identify and rank order the five greatest perceived threats facing each county's reef system. This information then provided the basis for an action plan that could further engage the community, and help to

galvanize public awareness and support for conservation. Post-workshop evaluations were very positive, and indicated that the participants were very pleased with not only what they learned, but how they could be empowered to address reef conservation within the tourism sector. A synopsis of each workshop follows.

Workshop #1: Broward County, Cooperative Extension Service Office, May 3, 2006

Thirteen participants attended this weekday program including an editor for an on-line diving magazine, several scuba instructors, the IGFA education director, a local park naturalist, several extension agents, two scuba tour operators (including the president of the Broward County dive charter association), and several Broward County resource managers. The variety of attendees made for lively and informative discussions, and sharing of ideas that would have been impossible with a less diverse audience. Local perspective was provided by an outstanding presentation on Broward County's reefs by Ken Banks, Broward County Environmental Protection Department.

Pre-training evaluations indicated that attendees possessed good to excellent understanding of coral reefs (not surprising given that many were involved in local resource management). Some interesting insights from pre-training comments were that participants were interested in subject such as: how to create certification programs for eco-tour operations; how to teach conservation through sport fishing; and gaining a better understanding of what was termed the "local politics" of coral reef conservation.

In terms of locally perceived threats to Broward's coral reefs, the group identified as the top five: run-off; overfishing; sewage outfalls; boat/ship groundings; and lack of enforcement of existing laws and regulations. In all four break-out groups, the problems caused by the nearshore sewage outfalls were ranked as the most serious concern for Broward's reefs. As the main topic of the workshop was tourism, discussion also included ways to reduce or halt damage from recreational boat anchors and divers/snorkelers.

Post-workshop evaluations rated the program highly successful. Score were consistently in the 3 (agree) to 4 (strongly agree) range. Topics or ideas identified as of particular benefit or interest were: the "environmental waiver" discussion; how to use volunteers for water quality monitoring; strategies for presenting reef awareness and conservation to the public; and disappointment in the lack of participation by high-ranking SFWMD staff on the SEFCRI Teams.

Those in the diving industry consistently indicated that they were now motivated to give thorough pre-dive briefings to their customers. Another consistent comment from participants was that they appreciated and enjoyed the opportunity to interact with people from

sectors with whom they normally have little contact. All expressed that the workshop was well worth the time, and offered to help promote further programs of this nature.

Workshop #2: Miami-Dade County, Barry University, May 6, 2006

It was hoped that a Saturday format would attract members of the general public as well as industry professionals. However, only eight participants attended this workshop. Most were students and staff from Barry University's Sports Management—Dive Option program. Also in attendance was the head of interpretation for the Biscayne National Park, and a scuba instructor from a dive facility in Sarasota County. Local perspective was provided by an outstanding presentation on Miami-Dade's reefs by Steve Blair, Chief of Restoration at Miami-Dade Environmental Resources Management.

Pre-training evaluation indicated that this group did not have the same general knowledge of coral reefs as the Broward group. In fact, the self-assessment exercise showed that the group had minimal knowledge of coral reef science. While the evaluation also showed that few of the participants provided pre-dive briefings, this was perhaps because most attendees were students, and did not work full-time in the industry. Participants did not indicate any particular area of interest on the pre-evaluations aside from a desire to learn more about the causes and effects of diver impact on coral reefs.

In terms of locally perceived threats to Miami-Dade reefs, the group identified as the top five: pollution/eutrophication; overfishing; lack of awareness; sewage outfalls and agricultural run-off. In the "threat ranging" exercise, as in the Broward workshop, the group selected sewage outfalls as the primary threat to Miami-Dade reefs. Because of the smaller group size, we were able to discuss not only the threats facing local reefs, but what might be done to address these threats. The following "solution list" was created based on this discussion:

Lack of Awareness

- Outreach programs for hotels, schools, camps and retail stores selling marine-related equipment.
- Clean-up campaigns, including an effort to remove derelict traps
- Public service announcements
- Programs to promote and collect unused household chemicals
- Stenciling storm drains with "DRAINS TO OCEAN!"
- Providing awareness briefings to divers and snorkelers
- Inform fishers about the impact of taking "big mommas"
- Lead by example

- Provide photos of how threats have impacted reefs for a traveling display called “Reef Awareness—the Good, the Bad and the Ugly”
- Promote global awareness

Agricultural Run-Off

- Educate the public on the connection between agriculture and the reef
- Use environmentally-safe fertilizers and pesticides
- Assess need/enforcement of laws relating to this threat
- Put referendum on ballot for stronger regulation
- Require buffer zones between cultivated land and shoreline

Overfishing

- Ban overly destructive or indiscriminant fishing practices
- Educate local fisher clubs and guides about coral reefs
- Get involved in the political process to establish science-based limited and no-take zones
- Participate in “fish counts” like those sponsored by REEF
- Support strong enforcement of existing laws and regulations
- Put more effort into aquaculture to reduce commercial fishing pressure

Pollution/Eutrophication

- Lead by example and voice your opinion
- Implement effective recycling programs that raise awareness and get community involved
- Provide more animal-proof trash receptacles along beaches
- Reintroduce deposit system for bottles and cans
- Create more hazmat collection centers
- Provide tax refunds for hybrid car purchases, along with special parking areas
- Use “guilt” and increase media advertising showing the effects of pollution.

Sewage Outfalls

- Demand enforcement of current laws
- Put referendum on ballot for timetable to stop use of outfalls or for tertiary treatment
- Develop plan to pay for tertiary treatment
- Public awareness campaign to inform public of the problem of outfalls, the problems they cause, and the proximity to their beaches
- Publish underwater photos of outfalls
- Raise awareness of outfalls in public forums and media.

- Form a citizens' task force to address the issue

As with the Broward program, post-workshop evaluations rated the program highly successful. Satisfaction scores were consistently in the 3 (agree) to 4 (strongly agree) range. According to the evaluations, of particular benefit or interest was: the "threat ranking" exercise; bringing to light the issue of outfalls; the broad, global perspective presented on coral reefs; showing how sustainable practice is also good business practice; learning good facilitation techniques and networking. In the few weeks after the workshop, CORAL has received several requests for additional information and resource guides from individuals who heard about but were unable to attend. This indicates an extremely positive "word of mouth" response that would bode well for any follow-up programs.

Workshop #3: Palm Beach County, Hutcheson Cooperative Extension Service Center, May 10-11, 2006

With 19 participants, this was the largest turn-out of all three workshops (which indicates that a two-evening format is the best for future programs). The program also attracted the largest number of marine tourism professionals, including the owner of one of the largest dive centers on the Gold Coast (Skip Commager of Force-E). Also in attendance was a writer with Florida Sportsman magazine (who promised editorial support on coral reef education), two individuals developing a business plan for an ecotourism business, a local Sierra Club director and three graduate student in marine resource management with specific interests in tourism issues. An excellent overview of the status and problems facing Palm Beach reefs was provided by Ed Tichenor, Executive Director of Palm Beach Reef Rescue.

As expected with such a diverse group, pre-training evaluations indicated a great variance in the level of participant knowledge regarding coral reefs. It was also interesting to note that the same wide spectrum was seen among the dive operators regarding their use of pre-dive briefings. The pre-training evaluation also indicated that participants had a wide range of interests including: how local environmental laws are "supposed to be enforced;" how to set up a no-take MPA; how different groups can work together to promote conservation; reef restoration techniques; how tourism affects the reef; where knowledge gaps are in reef science; and the role of artificial reefs to mitigate damage to natural reefs;

In terms of locally perceived threats to Palm Beach's reef system, the group identified as the top five: algal blooms; siltation; anchor damage; destructive fishing (especially when lobstering); and lack of awareness. All but one group ranked algal blooms as the primary local threat. The group that didn't select algal blooms chose lack of awareness. Because of the size of the group, plus additional time given to the local expert's presentation, there was no time to conduct a "solutions" exercise. Not surprisingly, given the strong tourism perspective of the group, much of the discussion centered on tourism-related issues. This provided an opportunity to address solutions, though less formally, throughout the program.

Consistent with the other workshops, post-evaluations were good to excellent. Of particular benefit, participants indicated the

chance to meet and network with others was a strong motivation for their attendance.

Pre vs. Post Evaluations

The range of participants throughout the three workshops varied greatly including biologists, environmental educators, boat captains, dive operators and journalists. Consequently, the percentage of participants identifying themselves as having good or excellent knowledge in the areas of coral reef ecology, threats to coral reefs and coral reef conservation also varied. (67% in Broward County, 57% in Palm Beach County, 22% in Miami-Dade.)

In the post evaluations, 97% agreed or strongly agreed that the workshops gave them a greater understanding of coral reef ecology. Given that the range of background knowledge for participants was so wide, we can conclude that the curriculum in the Sustainable Marine Recreation Resource Guide is applicable to experts and novices alike.

While 45% of participants on the pre evaluations said they infrequently (never, rarely or sometimes) gave environmental briefings to their clients, 92% said that this workshop motivated them to reevaluate their current business practices, including giving environmental briefings.

Follow-up Evaluation

Given the short time between the end of the workshop series and final report deadline, it was decided to use a telephone survey to determine whether any longer-term learning goals were met. However, even after repeated requests, only 25 of the 38 attendees provided phone numbers. The results of these surveys are provided below. For those who did not provide phone numbers, a copy of the follow-up survey was sent to them via e-mail with a request to respond as soon as possible.

Only 17 of the 25 attendees who provided phone contacts were reached for the follow-up survey. In every case, respondents indicated that their knowledge of coral reef ecology, threats and conservation were improved based on their workshop attendance. In addition, all interviewees who were in the tourism sector indicated that they were, or planned to, "always" provide in-depth environmental briefings and other information on conservation (including Coral's tourism guidelines) to their guests. Twelve of the 17 also indicated that the workshop had motivated them to become more involved in local conservation efforts, and six expressed interest in participating on one of the SEFCRI Teams.

Among the actions taken by respondents were: contacting local schools and civic organizations to make presentations on coral reef issues; teaching a specialty diver certification class based on the workshop material; incorporating the “environmental waiver” into the operation; and asking the hotels that they work with to distribute education materials (Coral’s tourism guidelines and Issue Briefs). One respondent, a resource manager, mentioned that the workshop has motivated a desire to pursue the feasibility of a local eco-tour certification program.

All respondents were interested in additional training. Suggestions for future topics included: training in media/public relations; programs/materials that could be used for school-aged children; a workshop on “interpretation techniques”; training in “citizen advocacy” techniques; and a desire to see elected officials attend similar training.

Remarks and Recommendations

Either during the workshop or in the evaluations, several ideas were presented by attendees that seemed worthy of further consideration. They are listed below:

One of the most consistent comments was the need to develop an education program for hoteliers. It was recognized that representatives from this sector were unlikely to attend a full-day program. In fact, the groups agreed that most in the hotel industry don’t even realize that coral reefs are either important to them or that their properties have any detrimental impact on reefs. A suggestion was made to create an hour-long presentation that could be presented at a luncheon or similar function, explaining the importance of coral reefs to ALL tourism sectors, and how hotels could be a prime mechanism for improved awareness among tourists.

Because Southeast Florida is not merely a tourist destination, not all (probably not even most) of the public’s interaction with local coral reefs is facilitated by some tourism entity. Therefore, creative approaches must be used to communicate the conservation message to locals. Special outreach efforts should be made for boaters and fishers, as they far outnumber divers and snorkelers.

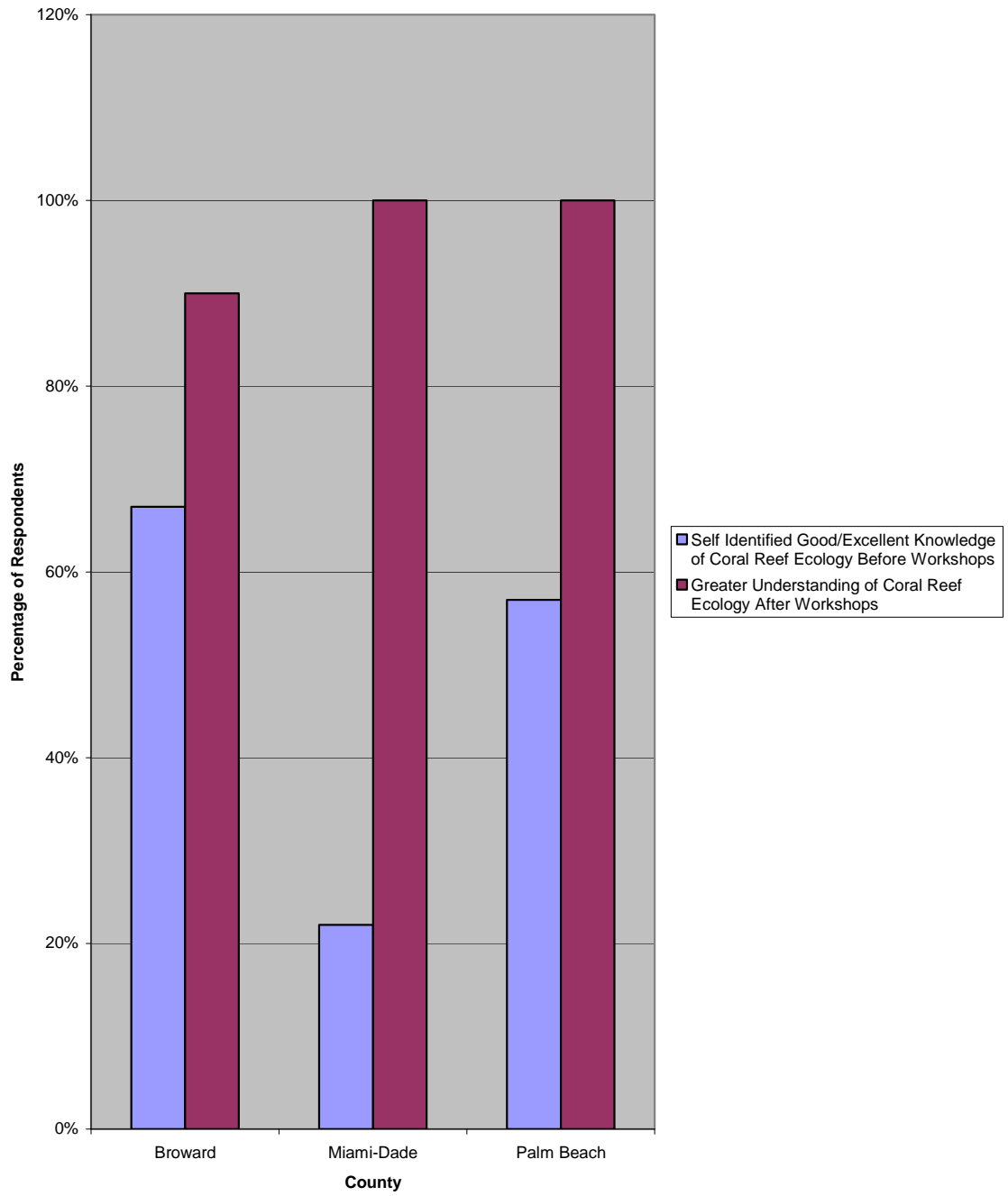
The relatively poor showing by professionals in the dive tourism community (even after special efforts were made to invite them) was a consistent topic of discussion among workshop attendees. It was suggested that the sanctioning training agencies (PADI, NAUI, SSI), to

which all dive operators belong, be engaged to assist in future efforts. Perhaps even some form of incentive can be provided by the training agencies to encourage attendance by their members. This idea could have much potential, especially if training agency representatives are involved in planning or presenting the program. It should be noted, however, based on this writer's past experience, that this lack of broad support from dive operators is nothing new. A similar lack of enthusiasm was also seen during early attempts of the Florida Keys National Marine Sanctuary (Sea Smart/Dive Smart Program) to engage the diving community. Only time and consistent attempts to engage the dive community have succeeded in bring this sector onboard for conservation efforts in the Florida Keys. This probably will be the case for operators in the four-county target region as well.

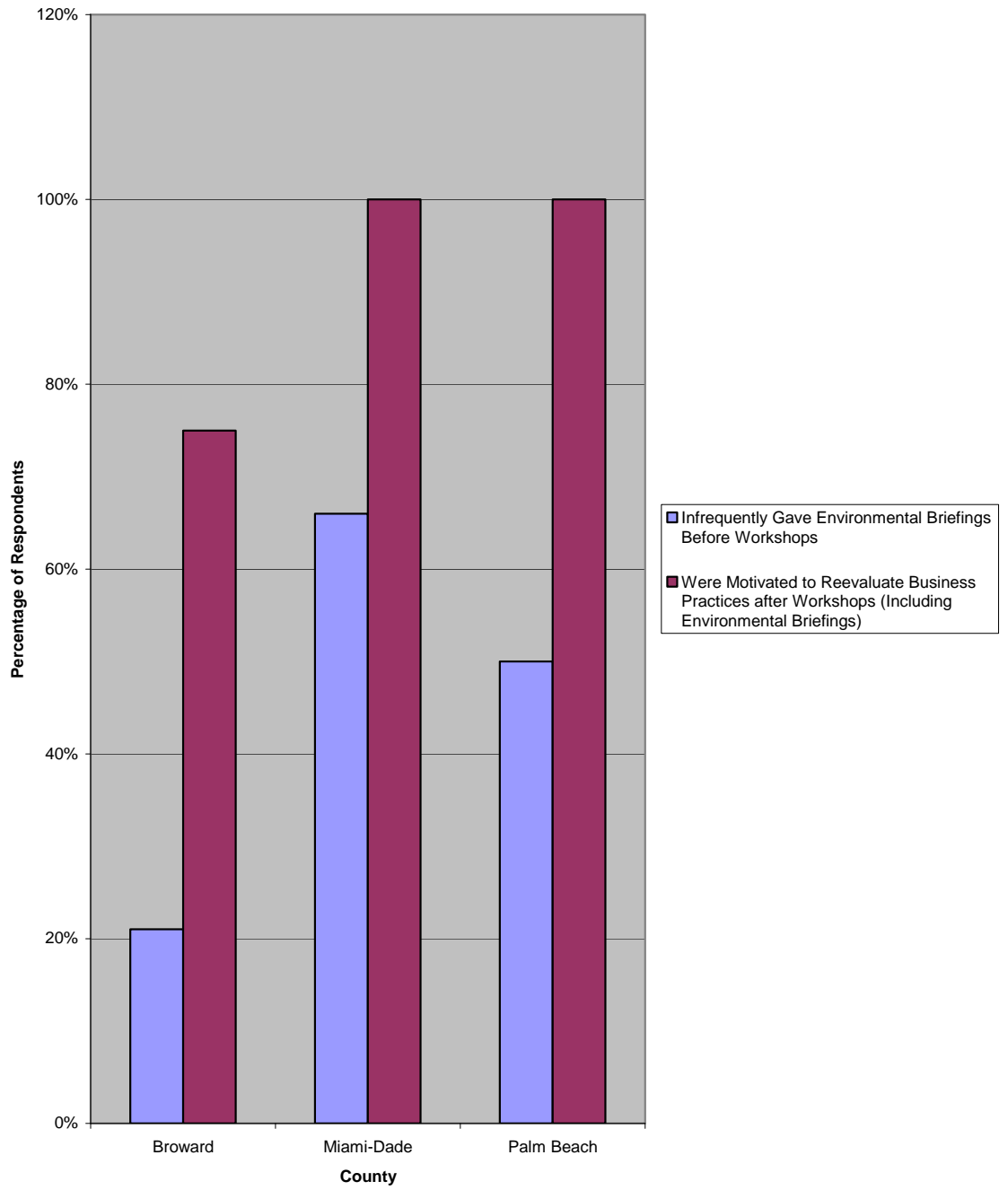
While attendance at the workshops was disappointing, the response from those who did attend was overwhelmingly supportive of further educational programs of this nature. The suggestion was to develop shorter and more focused programs geared to particular tourism segments (such as that mentioned above regarding hoteliers).

Attendees were very appreciative of the extensive Resource Guide they received, and the time spent during the workshop showing them how to use this resource as an outreach tool. Regardless, whether it's a follow-up series or workshops like these, or a different approach, all agreed on the need for more educational programs and networking opportunities for all segments of the tourism and resource management communities.

Pre/Post Coral Reef Knowledge



Pre/Post Business Practices



Broward County Attendees

NAME	PROFESSION	BUSINESS	CONTACT
Millis Keegan	Editor	Dive Web Sites	Millis.Keegan@diveguru.net
Joe Bartoszek	(ret. NASA) scuba instruct.	Cocoa Bch. Scuba Odyssey	Joe@cbscubaodyssey.com
Joanne Howes	Parks naturalist	Anne Kolh Nat. Ctr. Bro. Co. Parks & Rec.	jhowes@broward.org
Dawn Miller-Walker	Edu. & Jr. Angler Dir.	IGFA	dwalker@igfa.org
Lou Fisher	Gov. BC	BC Envir. Prot. Dept.	lfisher@broward.org
Jeff Torode	Tour Op.(scuba)	S.Fl.Diving Hdqts.	sfdhjeff@aol.com
Pete Paccotta	US 1 Scuba Inst./Owner	US1Scuba	Us1scuba@attglobal.net
Charlene Burke	Env. Outreach	Allstate Resource Mgmt.	waterweed@aol.com
Ricardo Martinez	Ext. Agnt.	Broward Co. Ext. Ed. Div.	Rimartinez@broward.org
Merella Crane	Ext. Agent	Fl. Sea Grant	marella@ufl.edu
Seth Woodburn		Atlantis Reef Soc.	954-629-7381
M. Ahern			
Karen Bareford		FDEP	Karen.bareford@dep.state.fl.us
Dan Behringer	Broward EPD-Biologist		dcbehringer@broward.org 954-519-1218

Miami-Dade County Attendees

NAME	PROFESSION	BUSINESS	CONTACT
Shannon Spillman	Student		610-864-1102
Ashley Leonard	Student		469-826-1259
Rebecca Ross	Teacher-dive Inst.		786-280-3483
John Eckle	Inst.		941-748-1523
Cliff Goyle	Student		863-860-0185
Jeff Bolen	Student		508-667-4021
Susan Gonshor	Park Mgr.		305-230-1144
Stefanie Pistac	Student		410-440-0305
David Paul	Bartender/DM		954-736-9546

Palm Beach County Attendees

NAME	PROFESSION	BUSINESS	CONTACT
Terry St Jean	Reef-Rescue		ttinkkw@aol.com 305-304-3941
Ed Tichenor	Reef-Rescue		etichscuba@aol.com 561-699-8559
Dave Martin	Eco-Tours		doublepaddle@earthlink.net 561-746-6842
Kim Eaton-Martin	Eco-tours		Same as above
Alyssa Dodd	Education	PBC Coop. Ext	adodd@ifns.ufl.edu 561-233-1725
Chris Wilkins	Dive shop owner	Ameridive	scuba@ameridive.com 561-732-0833
Janet Phipps	Pbco. DERM	Co. govt.	jphipps@co.palm-beach.fl.us 561-233-2513
Richard Glove	Capt.	UW Explorer	UW Explorer.com RCG.Dot.Com.@aol.com 561-252-3929
Brett Fitzgerald	Freelance outdoor writer		slabfitz@aol.com 561-547-0669
Susan Gardner	Dive boat	Narcosis	slgardnerlle@earthlink.net 561-306-9294
Elaine Blum	Dive Boat	Narcosis	eblum@adelphia.net 561-523-7061
Austin Welsh	Student		afwelsh@hotmail.com
Paul Welsh	CPA/Cpt/Inst.		taxnerd@msn.com 561-309-8201
Jamie Monty	DEP/CAMA		Jamie.monty@dep.state.fl.us 772-429-2995
Justin Craig	Student	FIT	jcraig@fit.edu 843-834-5555
Adam Priest	Student	FIT	apriest@fit.edu
Carolin Meisel	Student	UF	carolin@ufl.edu 352-870-4090
Skip Commager	Dive Op	Force-E	skip@force-e.com
Drew Martin	Conservation chair	Losahatchee Group Sierra Club	dmandch@aol.com

Pre-Training Evaluation Form

1. What is your profession?

2. How would you describe your knowledge of: (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

None A little Some Good Excellent

b) Threats to coral reefs (what is killing coral reefs).

None A little Some Good Excellent

c) Coral reef conservation (how we can protect coral reefs).

None A little Some Good Excellent

3. How often do you give environmental briefings to your clients?

Never Rarely Sometimes Often Always

4. Do you participate in coral reef conservation activities?

Never Rarely Sometimes Often Always

Please give details: _____

5. Why are you attending this workshop?

(Please rate each on a scale from 1 to 5. 1=not very important, 5=very important)

___ To improve my knowledge of coral reef ecology and conservation.

___ To learn how to explain coral reef ecology and conservation to my clients.

___ To find out how I can improve my business.

___ To find out how I can actively help protect local coral reefs.

___ To meet with other people in my community to discuss coral reef issues.

Please list any other reasons:

6. What topics/issues would you like addressed today in our discussions? (e.g. user fees, carrying capacity, diver damage, coral parks, environmental briefings, mooring buoys, etc.)

7. How did you find out about this workshop?

Pre-Training Evaluation

(BROWARD)

1. What is your profession?

Resource manager, non-profit organization, biologist, scuba instructor (2), journalist, park naturalist (2), environmental educator, dive operator (2), extension agent (2)

2. How would you describe your knowledge of: (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

1 None 1 A little 3 Some 8 Good 1
Excellent

b) Threats to coral reefs (what is killing coral reefs).

None 1 A little 2 Some 9 Good 2
Excellent

c) Coral reef conservation (how we can protect coral reefs).

None 1 A little 4 Some 6 Good 2
Excellent

3. How often do you give environmental briefings to your clients?

Never 1 Rarely 2 10 Often 1 Always
Sometimes

4. Do you participate in coral reef conservation activities?

1 Never 3 Rarely 1 4 Often 1 Always
Sometimes

5. Why are you attending this workshop?

(Please rate each on a scale from 1 to 5. 1=not very important, 5=very important)

2	5	5	5	5	5	5	5	5	5
4	4	5	5	5	5	5	4	5	5
3	5	3	5	3	4	5	4	3	2
5	5	3	5	5	5	5	5	4	5
14	5	5	5	4	5	5	3	5	5

6. What topics/issues would you like addressed today in our discussions?

Politics of coral reefs, diver damage, coral parks, effects of Lake Okeechobee, anchoring, environmental briefings, mooring buoys, operator certification programs

7. How did you find out about this workshop?

Internet, SEFCRI, e-mails, Ocean Fest, flyer, Extension Agent

Pre-Training Evaluation

(MIAMI-DADE)

1. What is your profession?

University student (4), scuba instructor (2), middle school teacher

2. How would you describe your knowledge of: (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

None 1 A little 4 Some 1 Good Excellent

b) Threats to coral reefs (what is killing coral reefs).

None 1 A little 4 Some 1 Good Excellent

c) Coral reef conservation (how we can protect coral reefs).

None 1 A little 3 Some 2 Good Excellent

3. How often do you give environmental briefings to your clients?

2 Never 1 Rarely 1 Sometimes 2 Often Always

4. Do you participate in coral reef conservation activities?

Never 3 Rarely 2 Sometimes 1 Often Always

5. Why are you attending this workshop?

(Please rate each on a scale from 1 to 5. 1=not very important, 5=very important)

5	3	5	5	5
3	5	5	5	3
1	2	2	5	1
4	1	5	5	5
2	4	5	5	4

6. What topics/issues would you like addressed today in our discussions?

diver damage, environmental briefings, mooring buoys

7. How did you find out about this workshop?

Professor Sharon Kegeles (Barry Univeristy), magazine

Pre-Training Evaluation

(PALM BEACH)

1. What is your profession?

environmental educator, scuba instructor, dive boat captain (2), graduate student (3), marine tour operator, journalist, resource management, retiree

2. How would you describe your knowledge of: (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

None 5 A little 1 Some 6 Good 2
Excellent

b) Threats to coral reefs (what is killing coral reefs).

1 None 2 A little 3 Some 3 Good 3
Excellent

c) Coral reef conservation (how we can protect coral reefs).

1 None A little Some 7 Good 4
Excellent

3. How often do you give environmental briefings to your clients?

2 Never 4 Rarely 1 Sometimes 2 Often 4 Always

4. Do you participate in coral reef conservation activities?

Never 3 Rarely 2 Sometimes 1 Often Always

5. Why are you attending this workshop?

(Please rate each on a scale from 1 to 5. 1=not very important, 5=very important)

5	5	5	4	4	5	5	4	5	5	5
5	3	5	5	4	5	5	2	5	5	5
1	1	2	5	5	3	1	1	1	1	1
5	5	5	5		4	5	3	3	5	5
4	5	4		5	5	3	5	4	5	5

6. What topics/issues would you like addressed today in our discussions?

User fees, carrying capacities, lessons from other marine parks, how to establish MPAs, surf tourism, research gaps in coral reef management and science, sewage outfalls, siltation damage, artificial reefs to mitigate damage to natural reefs, business of tourism, status of local reefs

7. How did you find out about this workshop?

Extension Agent, Surfrider Foundation, friend, Ft. Lauderdale Marine Directory News Service, Florida Sportsman magazine, SEFCRI

Post-Training Evaluation Form

1. What is your profession?

2. Name of your business or organization (optional):

If you work in ocean recreation and tourism, please answer # 3 and #4
If you are involved with marine parks, government, or non-governmental organizations,
please go to # 5

3. Do you give pre-dive/pre-activity briefings to your customers emphasizing environmental best practice?

Yes No

If no, why not? _____

4. If yes, how often (check below)?

Rarely Sometimes Often Always
(few times a year) (once or twice a month) (weekly) (every day)

Please give details: _____

3. Has this workshop motivated you to use tools such as CORAL's *Guide to Good Practice* (pictured)?

Yes No

If yes, how often (check below)?

Rarely Sometimes Often Always
(few times a year) (once or twice a month) (weekly) (every day)

If no, why not? _____



4 Has this workshop illustrated new ways for your business/organization to work with other businesses, marine parks, marine protected areas, and non-governmental organizations?

Yes No

If yes, how? If no, why not?

In this next section, please **circle the number** that indicates your responses based on what you believe, **not** what you think the answer **should** be.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Before these workshops, I felt confident in my understanding of coral reef ecology...	1	2	3	4
2. I have a greater understanding of coral reef ecology following these workshops...	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
5. These workshops addressed issues important to the local community...	1	2	3	4
	What issues are important to you (most important to least)?			
	1)			
	2)			
	3)			
6. I enjoyed these workshops...	1	2	3	4
7. I can increase my business by using and marketing sustainable approaches...	1	2	3	4
	What approaches might you use?			
8. I found the <i>Threat Ranking</i> activity helpful...	1	2	3	4
	What was helpful or not helpful?			
9. I found the <i>Solutions</i> activity helpful...	1	2	3	4
	What was helpful or not helpful?			
9. The content/length of the presentations was appropriate for the audience ...	1	2	3	4
10. I would recommend these workshops to others...	1	2	3	4
11. These workshops have motivated me to reevaluate my business practice or behavior...	1	2	3	4
12. These workshops were beneficial to me...	1	2	3	4
	Describe:			

Post-Training Evaluations - Broward County					
	Strongly Disagree	Disagree	Agree	Strongly Agree	
UNDERSTANDING					
Before these workshops, I felt confident in my understanding of coral reef ecology.	0	0	5	5	n=10
I have a greater understanding of coral reef ecology following these workshops.	1	0	1	8	n=10
44% of respondents strongly agreed in a perceived confidence in their understanding of coral reef ecology entering the workshops; 88.8% (more than double) of the respondents agreed in a perceived increase in understanding of coral reef ecology as a result of the workshops (of that, 66.6% strongly agree in a perceived greater understanding; 16.6% indicated a perceived significant shift towards greater understanding--strongly disagree/disagree to strongly agree); 11.1% indicated disagreement in a greater understanding (strongly agree to disagree) as a result of workshops (these respondents self-identified as government or scientist affiliation) See Charts 1 and 2.					
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BENEFIT/VALUE					
These workshops addressed issues important to the local community			1	6	n=10
I enjoyed these workshops.	0	0	0	10	n=10
I can increase my business by using and marketing sustainable approaches.	1		2	7	n=10
I found the Threat Ranking activity helpful		1	2	6	n=9
I found the Solutions activity helpful					
The content/length of the presentations was appropriate for the audience.			3	6	n=9
I would recommend these workshops to others.	0	0	0	10	n=10
These workshops were beneficial to me	0	2	2	6	n=10
100% of respondents indicated they both enjoyed and benefitted from the workshops; 100% of respondents would recommend these workshops to others (84.2% strongly agree they would recommend; 16.6% agree they would recommend.) See Charts 3, 4, and 5.					
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BUSINESS PRACTICE					
These workshops have motivated me to reevaluate my business practice or behavior.	0	2	3	3	n=8
Note: Smaller n reflects business sector subset answering these questions. 100% of respondents indicated agreement that they can realize increased business by using and marketing sustainable approaches (81.8% strongly agree they can increase their business); 90.9% of respondents indicate they are motivated to reevaluate their business practice or behavior as a result of the workshops (the outlier requires qualification: respondent indicated they disagree in being motivated as they are already actively reevaluating their business practice and behavior.) See Charts 6 and 7.					

Post-Training Evaluation - Miami-Dade County					
	Strongly Disagree	Disagree	Agree	Strongly Agree	
UNDERSTANDING					
Before these workshops, I felt confident in my understanding of coral reef ecology.	1	1	4	0	n=6
I have a greater understanding of coral reef ecology following these workshops.	0	0	1	5	n=6
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BENEFIT/VALUE					
These workshops addressed issues important to the local community			0	6	n=6
I enjoyed these workshops.	0	0	0	6	n=6
I can increase my business by using and marketing sustainable approaches.	1		5	1	n=6
I found the Threat Ranking activity helpful		1	2	6	n=9
I found the Solutions activity helpful			3	3	n=6
The content/length of the presentations was appropriate for the audience.			1	5	n=6
I would recommend these workshops to others.	0	0	1	5	n=6
These workshops were beneficial to me	0	2	1	5	n=6
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BUSINESS PRACTICE					
These workshops have motivated me to reevaluate my business practice or behavior.	0	0	1	6	n=6

Post-Training Evaluation - Palm Beach County					
	Strongly Disagree	Disagree	Agree	Strongly Agree	
UNDERSTANDING					
Before these workshops, I felt confident in my understanding of coral reef ecology.	3	1	1	2	n=7
I have a greater understanding of coral reef ecology following these workshops.	0	0	4	3	n=7
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BENEFIT/VALUE					
These workshops addressed issues important to the local community			4	4	n=8
I enjoyed these workshops.	0	0	2	6	n=8
I can increase my business by using and marketing sustainable approaches.	1		3	2	n=5
I found the Threat Ranking activity helpful		1	3	1	n=5
I found the Solutions activity helpful			3	3	n=6
The content/length of the presentations was appropriate for the audience.			1	5	n=6
I would recommend these workshops to others.	0	0	1	5	n=6
These workshops were beneficial to me	0	0	3	2	n=5
	Strongly Disagree	Disagree	Agree	Strongly Agree	
BUSINESS PRACTICE					
These workshops have motivated me to reevaluate my business practice or behavior.	0	0	3	4	n=7

Follow Up Evaluation Form

1. What is your profession?

2. After completing the workshop, how would you describe your knowledge of the following topics compared to your prior knowledge? (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

about the same somewhat more Much more

b) Threats to coral reefs (what is killing coral reefs).

about the same somewhat more Much more

c) Coral reef conservation (how we can protect coral reefs).

about the same somewhat more Much more

3. How often do you now plan to provide environmental briefings to your clients?

Never Rarely Sometimes Often Always

4. To what degree did your workshop attendance motivate you to participate in coral reef conservation activities?

not at all somewhat considerably absolutely

Below please give details on how you plan to incorporate any of the ideas that you learned at the workshop: (optional)

5. What topics/issues would you like addressed in the workshop that were not covered in the discussions?

6. Would you be willing to attend additional workshops like this one in the future?

yes no maybe

7. Would you be willing to help promote workshops like this one in the future?

yes no maybe

Follow Up Evaluation

(BROWARD)

1. What is your profession?

Resource manager (2), scuba instructor, dive operator, environmental educator,

2. After completing the workshop, how would you describe your knowledge of the following topics compared to your prior knowledge? (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

about the	5	4 Much
same	somewhat	more
	more	

b) Threats to coral reefs (what is killing coral reefs).

2 about	3	4 Much
the same	somewhat	more
	more	

c) Coral reef conservation (how we can protect coral reefs).

about the	3	3 Much
same	somewhat	more
	more	

3. How often do you now plan to provide environmental briefings to your clients?

Never	Rarely	4 Often	5 Always
	Sometimes		

4. To what degree did your workshop attendance motivate you to participate in coral reef conservation activities?

not at all	1	5	3
	somewhat	considerably	absolutely

Below please give details on how you plan to incorporate any of the ideas that you learned at the workshop: (optional)

5. What topics/issues would you like addressed in the workshop that were not covered in the discussions?

What role diver training agencies can have in assisting conservation and regulator efforts for coral reefs; grassroots political organization techniques; how get into and handle press

6. Would you be willing to attend additional workshops like this one in the future?

9 yes no maybe

7. Would you be willing to help promote workshops like this one in the future?

9 yes no maybe

Follow Up Evaluation

(MIAMI-DADE)

1. What is your profession?

Student (4), teacher, scuba instructor

2. After completing the workshop, how would you describe your knowledge of the following topics compared to your prior knowledge? (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

about the same	2 somewhat more	4 Much more
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b) Threats to coral reefs (what is killing coral reefs).

about the same	3 somewhat more	3 Much more
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c) Coral reef conservation (how we can protect coral reefs).

about the same	3 somewhat more	3 Much more
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3. How often do you now plan to provide environmental briefings to your clients?

Never	Rarely	2 Sometimes	Often	4 Always
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4. To what degree did your workshop attendance motivate you to participate in coral reef conservation activities?

not at all	3 somewhat	3 considerably	absolutely
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Below please give details on how you plan to incorporate any of the ideas that you learned at the workshop: (**optional**)

5. What topics/issues would you like addressed in the workshop that were not covered in the discussions?

Educational materials with a "light/cartoonish" message; more business information

6. Would you be willing to attend additional workshops like this one in the future?

6	yes	no	maybe
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7. Would you be willing to help promote workshops like this one in the future?

6 yes no maybe

Follow Up Evaluation

(PALM BEACH)

1. What is your profession?

resource manager, tour operator, marine educator, biologist (2), journalist (2)

2. After completing the workshop, how would you describe your knowledge of the following topics compared to your prior knowledge? (Please check the box as appropriate)

a) Coral reef ecology (how coral reefs function).

2	about	4	2
the same		somewhat	Much
		more	more

b) Threats to coral reefs (what is killing coral reefs).

3	about	3	2
the same		somewhat	Much
		more	more

c) Coral reef conservation (how we can protect coral reefs).

3	about	3	2
the same		somewhat	Much
		more	more

3. How often do you now plan to provide environmental briefings to your clients?

Never	1	Rarely	2	Often	5	Always
		Sometimes				

4. To what degree did your workshop attendance motivate you to participate in coral reef conservation activities?

not at all	2	3	3
	somewhat	considerably	absolutely

Below please give details on how you plan to incorporate any of the ideas that you learned at the workshop: (optional)

5. What topics/issues would you like addressed in the workshop that were not covered in the discussions?

Coral reef educational materials gear to beachfront property owners/businesses, schools, anglers and boaters; permitting of sewage outfalls, legislative and legal information on reefs, (see extensive feedback from Millis Keegan)

6. Would you be willing to attend additional workshops like this one in the future?

8 yes no maybe

7. Would you be willing to help promote workshops like this one in the future?

8 yes no maybe