

Subject: EcoReefs - Need a decision
From: Kevin Kirsch<Kevin.Kirsch@noaa.gov>
Date: Tue, 22 Aug 2006 20:03
To: Craig Lilyestrom <craig_02@mac.com>
CC: Tom Moore <Tom.Moore@noaa.gov>, Michael Nemeth
<mnemeth@lighthouse-technical.com>

Bruce has informed me that EcoReefs has told him on Friday that they have 30 modules in China. It will take approximate 40 days to get them to Puerto Rico. He wants to know whether the EcoReefs are something that we want to wait for or should we just go ahead and reattach the 350 fragments that we have waiting using the techniques we have already employed. It is possible if the weather cooperates that we will have completed the emergency coral reattachment before the EcoReefs arrive and would therefore have to remobilize to install them. Bruce has stated that he will do whatever the Trustees instruct but given that the fragments that we have already attached seem to be doing well (Michael, please confirm this since you were Bruce's dive partner) and our insistence that the fragments need to be reattached quickly, he was thinking that we may want to go ahead and reattach the remaining fragments.

EcoReef's inability to produce their product in a timely fashion at a reasonable price (air freight for 30 modules from China would have cost \$8K) prevents them from being an emergency response action. Unless someone believes that the EcoReefs will significantly increase the survivability of the fragments or provides some service that cannot be provided by available materials then I would say we forgo the EcoReefs in favor of getting the fragments attached.

We need to try to resolve this immediately so that Bruce can order the EcoReefs on Thursday when he gets back in the office if we want them.

Kevin

Subject: Re: EcoReefs - Need a decision
From: Craig Lilyestrom <craig_02@mac.com>
Date: Tue, 22 Aug 2006 20:58:03 -0400
To: Kevin Kirsch <Kevin.Kirsch@noaa.gov>
CC: Tom Moore <Tom.Moore@noaa.gov>, Michael Nemeth
<mnemeth@lighthouse-technical.com>

As I see it, the EcoReefs might provide interim structure and relief somewhat similar to *Acropora cervicornis* while the fragments grow. Instead of actually serving as substrate for reattachment of the fragments, would it be worthwhile to install them after the fact, in this role? It certainly would be expensive, I know.

I'm not convinced we should wait, and risk the survival of the fragments. We're getting deeper into hurricane season every day, and diving opportunities might become more limited as the season progresses. If we have the chance to reattach the fragments now, I honestly think it would be most prudent and responsible to do so.

So that's my vote. Reattach the A. c. fragments at the first opportunity. See if there is any role for the EcoReefs afterwards.

--Craig

Subject: Re: EcoReefs - Need a decision
From: Michael Nemeth <mnemeth@lighthouse-technical.com>
Date: Wed, 23 Aug 2006 20:25:53 -0500
To: Craig Lilyestrom <craig_02@mac.com>, Kevin Kirsch <Kevin.Kirsch@noaa.gov>
CC: Tom Moore <Tom.Moore@noaa.gov>

I agree that the ecoreefs are not a necessity for A. c. reattachment at this point. I suggest we take a good look at the fragments that have been attached thus far and then decide how best to proceed. We don't want to replicate any method that may be showing detrimental results as of now. We did see them a few days ago but a more focused is warranted I think. Tom and I can discuss this tomorrow and come up with a plan.

Michael

Subject: EcoReefs
From: Kevin Kirsch [mailto:Kevin.Kirsch@noaa.gov]
Date: Thursday, August 24, 2006 8:42 AM
To: Graham, Bruce
Cc: Craig Lilyestrom; Tom Moore; Michael Nemeth

Bruce,

The Trustees have discussed the situation with the EcoReefs and have decided to forgo their use during the emergency restoration. Michael is going to make a closer examination of the A. cervicornis fragments that have already been reattached to determine if any of the 3 methods used so far is showing any form of detrimental effect. Once that is completed we can then decide how we want to go about reattaching the remaining fragments.

Have a great weekend and I will see you after Labor Day.

Kevin

Subject: RE: EcoReefs
From: "Graham, Bruce" <bgraham@conshelf.com>
Date: Thu, 24 Aug 2006 13:51:18 -0400
To: Kevin Kirsch <Kevin.Kirsch@noaa.gov>
CC: Craig Lilyestrom <craig@caribe.net>, Tom Moore <Tom.Moore@noaa.gov>, Michael Nemeth <mnemeth@lighthouse-technical.com>, David Smith <dsmith@independentmaritime.com>

Trustees

Thanks for your prompt response concerning the use of EcoReefs. Maybe we can modify one of the existing strategies to provide more vertical relief and habitat structure. Incorporation of on-site rubble to produce a higher profile reattachment puddle is one suggestion. A good location may be directly west and north of the A. cervicornis thicket. Have you had a chance to discuss paint removal at the one problem area?

Best regards,
Bruce

Bruce Graham
Marine Scientist

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