

Synergy of Minds

Dolphin-Assisted Craniosacral Therapy

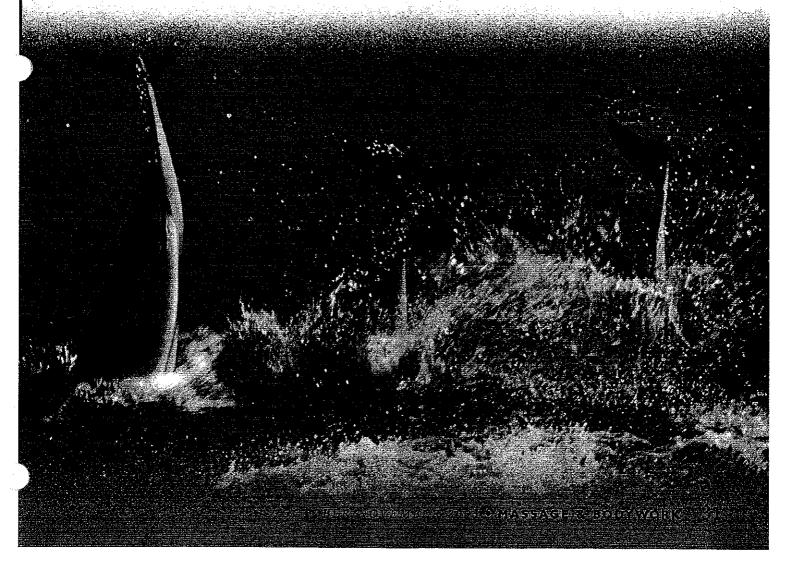
By Shirley Vanderbilt

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In sharing a great curiosity for each other, humans and dolphins have partaken of an interspecies dance, if you will, throughout time. We seem to have much in common — our complex social relationships, intelligence, dedication to kin, community cooperation, and, perhaps, our altruism toward not only our own kind but those unlike ourselves. Whether or not a dolphin's behavior, as in reportedly saving a human from drowning, can be described as truly altruistic is debatable. But it does appear there is something about human distress that attracts dolphins and inspires them to respond.

Over the past several decades, researchers in dolphinassisted therapy (DAT) programs have noted a particular affinity of dolphins for engaging gently and in a helping manner with the disabled. As a result, projects have developed in the United States and throughout the world, offering DAT with both captive and wild dolphins. At the Dolphin Research Center (DRC) in Grassy Key, Fla., the resident pod and their offspring have been studied in a variety of research endeavors, some related to learning more about dolphin behavior, biology, and intelligence, and others involving the impact of their presence on treating disabilities. As is typical with DAT, therapeutic sessions at DRC have primarily used interaction with dolphins as reward for behavioral change or progress in rehabilitation of the client. That's not to say the impact of the work is solely due to this conditioning response because, indeed, there is something about the humandolphin bond that is both heartwarming and exhilarating.

In 1996, a team of craniosacral therapists from the Upledger Institute (UI) in Palm Beach Gardens, Fla., began a unique therapeutic investigation with the DRC dolphins. In contrast to using dolphin interaction as reward, their work took on a slightly different perspective. The goal was to determine the effects of administering craniosacral therapy (CST) to clients in the water, with dolphins present and in physical contact with the client. What made the Upledger project remarkable was the way in which the dolphins responded to the CST sessions and seemed to influence the results.



Developed by osteopath John Upledger, CST involves a gentle, noninvasive touch focused on identifying and freeing restrictions in the body's craniosacral system --the membranes and cerebrospinal fluids surrounding the brain and spinal cord. Dysfunction in this system may cause sensory, neurological, and motor imbalances, and freeing the natural flow can allow the body to selfcorrect. The institute's initial pilot project focused on seven children, aged 5 to

12, diagnosed with a variety of ailments, such as cerebral palsy, brain injury, and epilepsy. Working as a three-member team, therapists provided both physical support of the client in the water and a multi-hand approach. Water sessions were alternated with table work on a floating dock adjacent to the dolphins' lagoon.

"The trainers developed a few hand signals based on what we said our needs were," says Upledger instructor Roy Desjarlais. "We gave them a little lecture on CST and a demonstration on an employee who had cancer." With cues established, such as a hand slap to request approach and a palm-up signal for the dolphin to put their rostrum in the cup of the therapist's hand, the work began.

"What we found out very quickly was that the dolphins were patient for half a day, then they started to disobey," Desjarlais says. At first they would go where directed and perform as instructed. "Then they came in where they wanted to, and we found what they wanted to do was incredibly accurate." The practitioners then "got out of the way," he says, although maintaining physical support of the client in the water, and gave the dolphins free reign to approach in whatever manner chosen.

Were the dolphins actually providing willful and purposeful assistance in the therapeutic process? The team believes so. "There's no way to prove or quantify it — a lot of what we do is experiential," Desjarlais says, noting the institute's focus on clinical outcome. "We try to put a vocabulary to what we feel. It feels like the dolphins are able to evaluate the signature of restrictions or illnesses in the patient, possibly the energy signature. My guess is when they tune in, they tune into the body that's there — and they don't care whose body it is. They sense something that either is different or amiss. They're able to



For Emily Masterson, aged 10 and diagnosed with cerebral palsy, curvature of the spine, and failure to thrive, the dolphin-assisted craniosacral sessions not only offer physical benefit but also put a big smile on her face.

match that signature with however they're able to project energy. By matching the signature of the issue, the tissue tends to resonate and release."

In an independent research report from the Upledger Foundation (1997), patients' responses to the dolphin-assisted CST were stated as "quite significant and included substantial reduction in pain, increased ease in breathing, greater general relaxation and specific reduction of hypertonicity, enhanced strength and

flexibility, increased appetite, and more restful sleep." It was surmised that perhaps the dolphins offered a "healing presence" in which their energy and sound played a part.

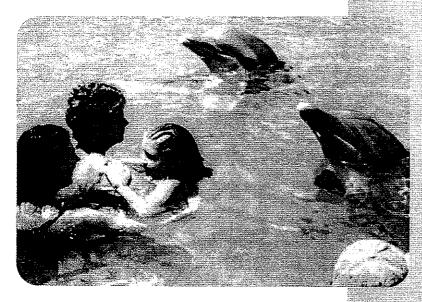
Healing Presence

hile theoretical in presentation, The Upledger Foundation's research report creates a framework from which to explore possible explanations for the dolphins' impact in this pilot program. First is the aspect of ultrasound, commonly used in medical applications today. Dolphins emit an ultrasonic frequency four times higher than that typically applied therapeutically, and that sound is delivered through water, a more efficient medium for transmission. Noting the immediate and often dramatic releases observed when patients received echolocation from the dolphins, the report states, "It would seem that dolphins have the capacity through a medium that we understand — ultrasonic vibration — to alter human tissue."

Another aspect examined is that of energy, with the suggestion that dolphins can sense an imbalance in our energy field, and through their interaction with us, facilitate alteration of the field.

A third aspect has to do with what the report terms "information bearing bioelectromagnetic sound energy," in which information contained within the dolphin's biosonar is somehow communicated to many levels of the body system, thus influencing its functioning processes. Finally, there is the aspect of community, or common purpose, in which the dolphins appeared to share. "The dolphins seemed to have sensed what we were about and chose to join us in our efforts," the report states.³

Whatever the reasons for the results, clinical outcomes from the pilot were impressive enough to inspire continuation of the institute's dolphin-assisted work. After several years of searching for an ideal location, they found what they needed at The Dolphin Experience in Freeport, Bahamas. Now in the second year of operation, the institute's Dolphin-Assisted



in a dolphin-assisted craniosacral session, Upledger therapists physically support Emily in the water, positioning her to allow the dolphins access for treatment.

Therapy Intensive Program is offered in four-day sessions scheduled throughout the summer. In addition to the client-centered treatment intensives, the Upledger staff developed a bioaquatic program for practitioners, focused on exploration of combining CST with the natural environment of the water, as well as dolphin interaction (See "BioAquatic Explorations," at right).

Synergistic Connections

As the dolphin-assisted work continues in the Bahamas, the theme of energetic exchange seems to remain at the forefront of describing the dolphins' healing presence. "There's a very strong energy component," Desjarlais says, "and dolphins seem to be natural therapists where they're able to facilitate a lot of movement and tissue response." He also notes a subtle undercurrent of emotional lifting, or lightening of emotional attitude, that occurs in participants.

Desjarlais says the dolphin's brain waves are innately in that calm, elevated state we humans aspire to with

BioAquatic Explorations

pledger's BioAquatic Explorations program for practitioners, established in 2000, evolved from the initial dolphin project and a continued investigation into the ben-

efits of working in the ocean environment. What has been learned over the years, says instructor Roy Desjarlais, is that facilitating release through CST in water takes a fraction of the time needed on land. In addition to this speeded up process, buoyancy experienced in the water provides a feeling of support and allows for body positioning that would be more difficult on the treatment table. Incorporating the energy of natural elements is another aspect, he says — "the abundant life force in the ocean, from the feeder fish to dolphin energy to the sea birds flying above.

"There's also the fluid interaction that is akin to the cerebrospinal fluid." Desjarlais says, "Part of what is so successful is that we're working in a like environment for the system we're targeting." By taking the stress of gravity out of the equation, an automatic relaxation can occur, freeing the body to open up and release.

"It's almost as though the ocean itself is the big master therapist making things happen," says David Dolan, instructor for the introductory Ocean Therapy class. Another aspect, he adds, is the expansion of sensory perception through weightlessness. "When you're floating with the therapists supporting, you loose a sense of where your skin ends and becomes one with the whole thing."

Students in BioAquatic Explorations are given ample opportunity for water practice, with a four-day schedule of alternating locations, accessed along Bahamian shorelines by the institute's 50-foot catamaran, Dolphin Star. Each course of the five-level program begins at The Dolphin Experience with a free-swimming introduction to dolphin behavior and interaction. On the third day, students again return to the dolphins' lagoon to practice and experience dolphin-assisted CST. Practitioners in the higher-level courses are sometimes invited back as visiting therapists for the dolphin-assisted intensive.

The Ocean Therapy class, open to both therapists and laypeople, has inspired some non-practitioners to change their careers and enter the therapy field, Dolan says. "What we've found is that basic lay people discover they have quite an innate talent they never knew they had."



Barb Tresness credits her son's dolphin-assisted craniosacral therapy for the improvements in his cerebral palsy symptoms. Here, the family enjoys a dolphin encounter. From left, Barb Tresness holding Graham, aged 5; Colby, aged 10; and Greg Tresness holding Tysen, aged 7.

meditation. This may heighten their ability to "tune in" to the human body, and each will do so a little differently — with a touch of the rostrum, a buzz or a click, or a flick of the tail. "We sit back and try to absorb whatever they're doing."

Normally, in a CST session with multiple therapists, one therapist assumes responsibility as the lead. But when it comes to working with dolphins, the dolphin is the lead, says Kevin Rose, CST instructor, who oversees the program. Standing on a submerged platform, several therapists physically support the client, positioning them to allow the dolphins access. The dolphins' approach and interaction varies from client to client, Rose says, and may include nudging or moving the rostrum back and forth on a specific area, along with emitting clicking sounds.

David Dolan, an Upledger instructor in the bioaquatics program, describes this human-dolphin therapy as an example of interspecies communication and cooperation. "It's a fascinating thing because we're not only interacting, but the dolphins seem to understand what we're doing." When a therapist is using CST, and another person joins in and applies their hands, "You can feel that interaction — you can feel that through the body — and you can feel that with the dolphins. It's a sensory experience."

At the Upledger Institute, therapists often have the opportunity to blend their CST work with that of other energy workers, such as acupuncturists. This combined approach can increase the potential effects of each modality, says CST instructor Rebecca Flowers who has been involved in the Bahamas program. "Before this experience with the intensive, I would have said it would be like working with another therapist," she says.

Instead, with the dolphins she sensed something uniquely different. "There were many times when it felt as though the dolphins were asking us to suspend what we were doing and simply support what they were doing."

Flowers theorizes that the ultrasonic frequency emitted by the dolphins affects all the energy layers of the body, whether the sound is directed at close contact or more generalized from a distance. She points out that sometimes the dolphins would deliver ultrasound to two patients at once, by positioning themselves between the working CST teams. "There was a sense of interconnection between all the patients through the dolphins," she says, somewhat like the dynamics of group psychotherapy.

Dolphin Encounters

or 5-year-old Graham Tresness, who was born with cerebral palsy, therapeutic interventions have been a daily routine. But it wasn't until he experienced CST work that his mother, Barb Tresness, saw him smile and laugh for the first time. "I thought to myself, if this does nothing more than bring him joy, you need to follow this — and I never looked back," she says. While on a family vacation in Las Vegas, Graham encountered his first dolphin, a poignant experience that Tresness says inspired a journey to the Bahamas.

In the summer of 2004, Graham and his mother attended a dolphin-assisted intensive. At age 4, and just 24 pounds, Graham was understandably wary. Flowers, who was part of his CST support team, says, "His muscle tension and membrane tension were extremely tight when we started. He was apprehensive because he was in the water, and while he was being held, he felt vulnerable. To him the dolphins were very big." Understanding the sensory issues involved, she and another therapist paired together to secure him in a neurologically calming hold, "to give him a greater sense of security." She speculates some of his fear might have related to sensing the energy from the dolphin's ultrasound, which could be disconcerting to a child.

When the dolphins realized Graham was startled at their fast-paced action, they slowed down and approached him gently. Rather than physically touching the child, the dolphins made contact through the hands of the adults holding him. At one point, with Tresness holding him at the waist, a dolphin touched her hand. Thinking the animal wanted contact at Graham's belly, she moved her hand to his back. The dolphin then moved underneath to



Graham, who has cerebral palsy, receives treatment from a dolphin while being supported by Upledger therapists and his mother, Barb Tresness, on the right.

again make contact with her hand. "I realized the dolphin was going through me to my son," she says.

"If a child is having difficulty in being touched on part of the body," Flowers says of the CST work, "we ask the client to put their hand there and we work through

their hand. The dolphins seemed to have an innate understanding it would be tolerable working through the therapist rather than making direct contact."

By the end of the intensive, Tresness was already seeing changes in Graham's body tone. He had gone from being hunched over to sitting up straight for long periods of time. "He was laughing at adult conversation at appropriate moments." Normally, laughing for any period of time would cause him to have acid reflux and vomit, but after one of his dolphin sessions, Tresness says, he was laughing and enjoying himself for 20 minutes with no problem.

While Graham's continued CST treatment (including several trips to the UI HealthPlex in Palm Beach Gardens) has been beneficial, Tresness also credits the combined dolphin/CST experience for the results. She was told by therapists to watch for gradual changes over a period of time, and several months later, Graham started taking his first weight-bearing steps

"We see that across the board," Flower says, "not only with the dolphins, but with CST in general. The body organizes itself around whatever is stuck. As we do this work, what we're doing is gently disorganizing those areas of restrictions. When that occurs, it disorganizes the system and gives it a chance to reorganize in a more functional, efficient way." This happens according to the body's own timeframe, as in the healing of bones. "I tell patients to look for any subtle change — mood, appetite, sleep, pain, muscle tone, digestion, elimination. The work is all about facilitating the body's self-correcting processes."

Graham can also now push off with his hands, Tresness says. "It's a window into the possibility of what may be there for us. I've tried lots of different things but the one that seems to make the most difference in him being at peace in his body is CST. We're not looking for any miracles, we're just looking for him to be happy in his body." With another trip to the dolphinassisted program in Graham's future, Tresness says, "Now I'm looking at him and thinking maybe not a wheelchair, maybe a walker."

Taking Turns

everal times
Desjarlais was invited by the DRC medical director to experiment with administering CST to resident dolphins.
"Some of the dolphins had structural issues," he says. "They are very physical with each other and prone to restrictions and prob-

lems like humans are." A retired female, rescued from Navy experiments and badly scarred, had been trained to present with her fluke or tail, with nose down, to receive the trainers' therapeutic touch. Designalis was warned that a flick of the tail might mean she'd had enough and was ready to bottom-dive, taking him with her. Desjarlais began working with her using an arcing technique as she swam by, to tune into areas of dysfunction. When trainers called her over, he placed his hands on her spine, holding areas that felt restricted. "Her spine went into a C-shape around the area I was holding, and her whole body would vibrate, almost as if she was exaggerating the holding. Then she would take off on a speed run." The routine repeated several times, with Desjarlais giving the hold signal, the dolphin returning for him to administer treatment for about a minute, and with that warning flick, taking off again.

What he did with the dolphins was not healing, but facilitating, Desjarlais says. "They're very responsive to craniosacral work, when they are in the mood to receive it, and their bodies seem to do well." Although noting similarities to working with humans, he says, "Their issues seem to communicate more clearly, but that's just me projecting."

Sometimes a turnabout occurred, with Desjarlais on the receiving end of treatment. While attempting to treat a dolphin, he says, "I had my hand in the water and kept intentioning, sending a message to it to come over." Although the dolphin refused the command, Desjarlais noticed his hand starting to buzz. "The dolphin was tuning my hand," he says, and for several weeks following, when treating clients, "My hand would get really hot." In another encounter, dolphins repeatedly approached his pelvic area. The next morning, he painlessly passed a kidney stone that had been lodged in his bladder. "I realized later they were sending a lot of energy to my pelvis."

Controversial Views

hat there is controversy in the arena of dolphin-assisted therapy and swim programs is a given. Most of what we

know, whether experiential or through documented research, is limited by the infancy of this field. Conflicting views arise in both the validity of research claims and the use of captive dolphins.

For the most part, DAT research has focused on positive treatment outcomes for humans, as this is easier to measure than the potential healing mechanisms involved on the

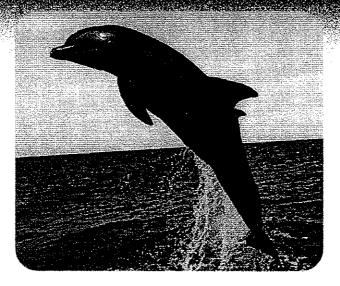
part of the dolphins. Critics of DAT studies say the research is flawed and that in fact there is no evidence that DAT is any more successful than other forms of animalassisted therapy.4 But those on the other side point to the anecdotal clinical outcomes and the possibilities they imply.

Robin Masterson, whose daughter Emily received dolphin-assisted CST in 2005, believes her daughter's cerebral palsy and spinal problems were greatly improved. Upledger instructor Carol McClellan, who accompanied a client with progressed Parkinson's disease to the program, describes a significant shift in the client's physical and social functioning. And then there's Graham.

But many questions remain regarding the dolphins' behavior, intent, and healing effect. All we really have are theories. Brensing et al. (2003) report that healing effects of ultrasound depend on duration, pressure, and frequency. Just what those parameters are for dolphin frequency is unknown, but, authors state, "ultrasound emitted by dolphins could have an effect on biological tissue under some circumstances, such as sufficient intensity, repeated application over several days or weeks, and a certain application per session." EEG studies have also documented brain wave changes in subjects swimming with dolphins, which researchers suggest may relate to positive changes in the endocrine system.6,7

Is the dolphins' interaction influenced by training, or are they altruistically engaging in the healing process? Within their own social group, dolphins are known to rely on cooperative and altruistic behavior for survival and, on occasion, to have extended these behaviors to interspecies interaction.8 Dolphins are quick learners and, in fact, have shown mastery of not only learning things they are taught, but also displaying new behaviors in anticipation of reward. They are also great mimickers and have been documented as spontaneously imitating movements, behaviors. and sounds of other creatures, including humans.9

In the initial stages of the dolphin-assisted CST program, trainers used fish to reward the dolphins for



positioning and interacting with the Upledger teams. But as CST instructors have noted, these rewards became unnecessary when the dolphins began initiating interaction on their own and with their own agenda. Desjarlais says that during the DRC pilot, dolphins in other pens would line up along the fences, and trainers reported hearing sounds they'd never heard before. "The dolphins

were reacting differently to us." A similar response has occurred in the Bahamas. Are the dolphins tuning in, being educated, or just being curious?

Finally, there's the highly complicated issue of dolphin captivity. Unfortunately, once a dolphin has been habituated to, or born into captivity, a successful release to the wild is improbable, if not impossible. But should those now in captivity be used for human gain, as is evident with the increasing number of dolphin swim and DAT programs? Betsy Smith, a pioneer of DAT, is among those who join in ethical disagreement with its continuation. While acknowledging the success of her own studies. Smith now questions the justification of controlling dolphins for this purpose. Having discontinued her research in 1992, she says, "Perhaps it is time for us to leave the dolphins alone."10

Whether one agrees that this work should continue or not, we must admit we are but fledgling communicators with this species and, as such, can only guess at their motivation and role in healing. Are they biologically drawn to imbalances they sense in the human body and innately driven to "fix" us? Are they kindred souls, as some have described, joining in the healing ritual through an altruistic desire "to help?" Or are they both? The truth of the matter is, only the dolphins know. Mas

References

- 1 The Upledger Foundation. Dolphins and Healing: A Research Report from the Upledger Foundation. Ul Enterprises; 1997.
- 4 Brensing K. Expert Statement on "Swirn with the Dolphin Programs and Dolphin-Assisted Therapy." Third Meeting of the Scientific Committee — Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Area, Available at www.accobams.mc/A.dccob/Wacco.risf10/0ea1a944ff93457bc1256fe30043ff63/\$FILE/SC3.Inf%2010.pdf Accessed June 10, 2005.
- 5 Brensing K. et al. Can dolphins heal by ultrasound? Journal of Theoretical Biology 2003; 225(1): 99-105.
- 7 Brensing, Expert Statement
- Conner, R., Ph.D. and Peterson, D.M. The Lives of Whales and Dolphins. New York, N.Y.: Henry Holt and Co.; 1994, 129-134.
- 10 Frohoff, T. and Peterson, B., Editors. Between Species: Celebrating the Dolphin-Human Band. San Francisco, CA: Sierra Club Books; 2003, 239-246.