

The 9th Annual International Sea Bean Symposium will be held at the Cocoa Beach Public Library, October 15th-16th, 2004.

Contact the Sea Aire for Motel Reservations, mention the Symposium for a \$10 discount, 1-800-319-9637, http://www.l-n.com/seaaire/

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From Ed

Well, I can hardly believe it, but this issue starts *The Drifting Seed*'s 10th year in publication! This wonderful newsletter that Cathie bestowed on us has grown like a liana, even in her absence. I know if she were here she would tell us all how pleased she was. I still remember how exited I would get each time I walked out to the mailbox and saw that a new copy had been delivered. I hope you still get that feeling. Like the curious seeds we pick up on the beaches that originate in distant places, so too this newsletter connects us all.

I urge each and every one of you to keep in touch, and if you have something to share, please, write or e-mail. The List Serve that Paul Mikkelsen has set up on the website is also a great way to keep in touch with each other through beach reports, seed growing/polishing tips, seed identification, old posted news, etc. Paul has been doing a great job keeping www.seabean.com looking great, and if you haven't been there in a while you need to take a look every month or two, at least.

Instead of going on and on about the newsletter, I would rather include a piece by Barbara Rolph of Merritt Island, Florida. I think her piece captures the excitement and wonder that all of us feel from time to time as we beachcomb and learn about driftseeds, and the connectedness that makes us all akin.

That Very Special Mary's Bean by Barbara Rolph

There is something truly magical about the Mary's bean. I moved back to Brevard County, FL in 1996 after having spent 4 years in Hawaii. I knew nothing about sea beans. I was walking near Satellite Beach and noticed a peculiar looking object that was laying near the surf. Apparently it had just washed up. It was black, lustrous, and beautifully shaped. I knew that this had to be something very special. But what was it? Where did it come from? More beans were then noticed where none had been noticed before. I found the hamburgers, sea hearts, and sailor's purses. How many different kinds of these marvelous objects were there?

A newly published book caught my eye. It was written by David Letherman, aka Dr. Beach, and it was about the most beautiful beaches in America. The cover of the book showed Lanikai Beach in Hawaii. To me Lanikai is heaven, and I was fortunate in that Lanikai was were I had lived. There was no way that I was not going to buy that book! Aside from Lanikai, the best part of the book was where sea beans were briefly discussed, and Cathie Katz and *The Drifting Seed* were mentioned. That started me on a quest to understand these beach marvels, and develop a love for Cathie's mission of spreading the word about our beloved sea beans.

I have been to most of the annual symposiums. From sea beans, to coquina fossils, to flotsam and jetsam, it is all there—a beachcomber's paradise. There is some kind of magic in the air during these get-togethers. We have to be the most eclectic, eccentric, and diverse group of people imaginable. What a grand forum for knowledge and fun.

Ed Perry, Pete Zies, John Dennis (now deceased), Bob Gunn, Cathy Yow, Pat Frazier, Curt Ebbesmeyer, Paul Mikkelsen, and others will thankfully continue the magic that Cathie started. We will miss Sue Bradley, and look forward to her return one day from Japan.

To think I might have missed out on all of this had I not found that first Mary's bean.

To visit Florida's beaches without noticing the wrack is like driving to Disney World to admire its parking lot. Cathie Katz in The Nature of Florida's Beaches, 1995

Large variation in size of *Entada* seeds from the Pacific coast of Costa Rica by Gerhard C. Cadée* & Sytske Dijksen

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In *The Drifting Seed* Jerry Sullivan (2003) reported on 'world's largest seaheart'. Sytske Dijksen visited Costa Rica in February 2004 and collected a number of *Entada* seeds from the Pacific coast near Dominical, Costa Rica (9°.16 N, 83°.51 W). These showed a large variation in size; two were even larger than Sullivan's world's largest!

Data

In the Table we give the measurements of the six seeds, as well as the 'size' as calculated by Sullivan's formula: Height x Width x Weight in ounces (1 oz = 28.35 g). We also calculated size as Height x Width x Thickness. Measurements were made with sliding callipers to the nearest 0.1 mm, and weight was measured using a Mettler H20T balance, which measures to the nearest 0.00001 g. This is of course not really necessary, so we give only two digits. These data show the largest *Entada* seed to be 5 times the (Sullivan's) size of the smallest. In weight the difference is about 2.5, and in size (Height x Width x Thickness) it is ~ 2.

Height	Width	Thickness	Weight	Size (H.W.W in	Size (H.W.T in
mm	mm	mm	g	oz)	cm)
46.3	36.4	20.5	17.23	1,024	34.55
44.6	47.3	21.2	21.63	1,609	44.72
49.4	53.0	23.3	31.38	2,898	61.00
52.0	58.8	21.8	31.38	3,384	66.66
56.2	65.2	25.6	42.72	5,522	93.80
56.8	62.6	26.0	42.29	5,304	92.45

Table giving the measurements of the six Entada seeds from the beach of Dominical, Costa Rica.

Discussion

We are certainly not the first to discover the large variability in measurements of *Entada* seeds. Figure 9.55 in Perry & Dennis (2003) shows the width of the largest specimen to be 1.7 times that of the smallest photographed (but no scale is given). The Costa Rican specimens show a comparable variation in width of 1.79. For the seeds of the New World *E. gigas,* Gunn & Dennis (1976) mention a diameter of 4 to 6 cm and a thickness of 1.5 to 2 cm. Interestingly, all our seeds exceed the 2 cm given by these authors. Two are longer than they report, and also longer than Sullivan's specimen.

For the Old World *E. phaseoloides* seeds, Gunn & Dennis (1976) give 3 to 6 cm length, 2.5 to 5 cm width and up to 2 cm thickness. Gerhard collected 24 *E. phaseoloides* seeds in drift from two small islands, Nuhu Jaan and Ingar, in the Banda Sea, Indonesia, during the Dutch-Indonesian *Snellius II* expedition in 1984-1985. The average dimensions (height, width and thickness) of these *E. phaseoloides* seeds were 40.7 (34.9-43.3) x 40.3 (35.0-46.4) x 18.6 (16.4-20.0) mm (the range given between brackets). These measurements indicate these seeds to be smaller than our *E. gigas* seeds from Costa Rica (justifying the name *E. gigas*!). Moreover, they are nearly round, not longer than wide as Gunn & Dennis (1976) wrote. Although the sample is larger, the seeds show less variation in dimensions than the *E. gigas* seeds from Costa Rica. The width of the largest is only 1.33 that of the smallest, in *E. gigas* this was 1.79.

Sullivan (2003) included the weight of the seeds in his estimate of 'size'. In these *Entada* seeds, which are impermeable for water, weight remains constant as Guppy (1912) proved. With their seed coats intact they didn't change in weight at all over a period of 2 years. Even after filing the seed coats Guppy observed that their weight remained very close to the original weight, they were not hygroscopic. Thus using weight in an estimate of size, as Sullivan (2003) did, does not introduce a variable factor as one might think at first sight.

Already Gunn & Dennis (1976) mentioned other Entada species that occur around the Pacific.

Recently Izumi Hanno (2003) reported on four species she found in drift in Japan and she states that the *Entada* species growing in Southeast Asia need a revision. As our Costa Rican seeds were collected on the Pacific coast, may we expect more than one species? The Equatorial Counter current could possibly transport seeds from other parts of the Pacific.

The Pacific coast of Costa Rica seems to be little studied with respect to tropical drift seeds although Armstrong (1998) has nice memories of the many hours spent there beach combing and has collected numerous tropical drift disseminules from both Caribbean and Pacific shores of Costa Rica. As far as we know he never published on them apart from his 1998 note. Sytske not only found these large *Entada* seeds, but also a whole series of other drift seeds. It will take us some time to identify these. The Pacific drift seems to differ in several aspects from the Atlantic, so probably the literature available, even the most recent book by Perry & Dennis (2003), will not suffice. We will let you know. If anyone has more data or literature on Pacific drift from this area please let us know!



Fig. The six Costa Rican *Entada* gigas seeds.

References

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The beauty of the natural world lies in the details, and most of those details are not the stuff of calendar art. Natalie Angier

The World's Largest Seaheart by Dr. Gerald Sullivan

(The following is a repeat of last issue's call for seahearts by Dr. Gerald Sullivan—just in-case any of you missed it! However, it is followed here by an update from Jerry, and a call for even more seahearts!—*editor*)

The UTMSI sea-bean collection at Port Aransas, Texas, continues to expand. The newest arrival is the "World's Largest Seaheart." This unbelievable seed was discovered stranded on the Port Aransas beach one-tenth mile northeast of Horace Caldwell Pier on 11-08-03. Its size was calculated as follows:

Height x Width x Weight = Size $52mm \times 60mm \times 1.4 \text{ oz} = 4,368$

The seed was weighed on a super digital US Postal Service scale. The odds that this seaheart is really the largest in the world are "slim-to-none and slim is out of town." Regardless of the fact, it will remain King until its size is successfully challenged by a larger *Entada gigas*.

Therefore, if you think you have a challenger seaheart which you have found washed up on a beach anywhere in the world, send it to Jerry "Seabeader" Sullivan at PO Box 2888, Port Aransas, Texas, 78373, USA.

Reward! Prize! No one said anything about a reward or prize, just professional self-satisfaction. Your champion seed will be displayed in the UTMSI showcase along with your name and where the new King was found. If, at a later date, a larger seaheart is submitted, yours would be returned to you.

In order for your seaheart to be considered, it must be officially qualified. If you would prefer to retain your champion seed rather than display it in a foreign country (The Sovereign State of Texas), your seaheart would be returned and the sign on the existing seaheart at UTMSI would simply be altered to read "World's Second Largest Seaheart." Happy hunting!

editor's note: UTMSI, The University of Texas at Austin Marine Science Institute, is located on the northeast tip of Mustang Island, a barrier island between the coastal bays and the Gulf of Mexico.

The World's Largest Seaheart: Update

THE KING IS DEAD! The largest seaheart in the world, which was discovered on the Texas coastline, has been usurped by the World's Largest Seaheart from Florida.

The newest King was submitted by Parks Services Specialist, Edward L. Perry IV of Melbourne FI. Ed found the stranded *Entada gigas* in 2001 on a Melbourne beach. The new King features:

Height x Width x Weight = Size 56 mm 69mm 1.40 oz. = 5409.6

It should be noted that the new King was almost disqualified from competition because of its extraordinary high polish. What a beauty!

I firmly believe there are larger seahearts out there – so let's hear from you. LONG LIVE THE KING!

Not to be outdone, a local seabeaner, Jan Cooper, claims to have the smallest seaheart in the universe and wants to enter it in a contest.

At about this same time, I received two quite small seahearts from Christopher Boykin of Miami, FI., who also wanted to enter both in competition.

Therefore, by popular demand, an official contest is mandated in order to determine the smallest seaheart in the world. Please send your itsy-bitsy-teeny-weeny seaheart to Seabeader Sully at P.O. Box 2888, Port Aransas, Texas, 78373, USA, in order to compete for the title, WORLD'S SMALLEST SEAHEART. "LONG LIVE THE QUEEN!"



A Letter to All Drifters from Emma Longhorn, UK longhorn@kamakuranet.ne.jp

Dear Drifters:

Hi from a newcomer! I'm a British beachcomber who's spent many happy weekends in Kamakura, on the Pacific coast of Japan. In the last year or so, I've developed eclectic tastes, inspired by everything from Curt's famous Lego ® toys to *The Drifting Seed*. (I search especially avidly for sea-beans. I'm always dreaming that, one day, the Kuroshio Current will land a sea-heart at my feet... More on that below!) Anyway, since Kamakura is such a popular tourist spot – and only an hour from Tokyo - I thought I'd let other beachcombers know what's here. Just in case anyone's planning to visit Japan...

Most of the stuff in Kamakura Bay doesn't so much drift in, as roll up. Not only is the bay very shallow, but people have been throwing all sorts of stuff in it for years! Prize finds among us beachcombers include rare pottery and horse teeth. It's possible to find celadon from 700 years ago, when broken pots, many of them from China, were used as landfill in Japan's first artificial harbor. (The remains of that harbor – Wakaejima - are exposed at low tide, at the eastern end of the bay, which is called Zaimokuza. The other end of the bay, which is also rich in finds, is called Yuigahama.) As for the horse teeth: Kamakura is famous for a battle and massacre in 1333, which ended its 150-year spell as the capital of Japan. It's been speculated that most of the horse teeth come from that era, when *bushido* was "The Way of Horse and Bow" – a bit rough on the horses, I'd say!

The victorious army invaded Kamakura from the Yuigahama side, wading around the headland of Inamuragasaki at low tide. West of the headland is a narrow, exposed, 3-mile beach called Shichirigahama. As fickle to the beachcomber as it is to the surfer, Shichirigahama is the sort of beach where you need to "let go your expectations" - or simply be in the mood for a nice long walk!

If it's finds you're after, I suggest concentrating on Kamakura Bay. It's given me some treasures, including an ancient whale's tooth, a pyrite-covered horse tooth, and an old blue medicine bottle that's the envy of my beachcombing friends. Talking of friends, I got a call today from Izumi Hanno - whom many of you know – telling me she'd found her very first horse tooth!

It is perhaps a more fortunate destiny to have a taste for collecting shells than to be born a millionaire. Robert Lewis Stevenson

The teeth are well worth looking for, and many times, they're not too hard to find. Storms toss them up among the seaweed, and low tides expose them in the mud. attractive finds Other include ceramic ornaments from New Year decorations. It's said to be unlucky to throw such decorations in the trash; instead, people burn them on the beaches, and let the ocean claim whatever's left. So don't be surprised if you come across an earthenware lobster, or - if you're very lucky - the worn but smiling figure of an auspicious god!

I have to admit: I collect such lucky charms. I'm not superstitious, but when it comes to seeds... "Hurry



up and tell us!" I hear readers thinking. "Where are all the seeds?" Well, if you're not too picky... Walnuts, in "57 varieties," are ubiquitous. Occasional finds include cycad, crinum, and other local seeds. But true southern drift seeds are few and far between in Kamakura! My best finds are a prickly palm nut, a coral bean, and a couple of tropical almonds. (Doesn't sound like much to most readers, I'm sure!) But someone in the next town did once find a sea-heart. And so did a friend of Izumi's, not too far away...

It's the kindness of others that keeps my dreams alive - which is why I wanted to share those dreams in here. (I'll spare you the details of my extensive collection of pumice, and my growing hoard of imitation Lego ® toys...) Anyway: If you travel to Japan, the odds are you'll visit Kamakura. I hope you'll have the time for a walk along the beach – and if you do, I hope you have good luck!

Emma Longhorn, UK





Curt's Stuff from Dr. Curtis Ebbesmeyer

Trapa Seeds. "Greetings from Coney Island, Brooklyn, New York," writes **David Kane**. "I heard Curt Ebbesmeyer talking about hyper-ducks on my local public radio (WNYC AM-820), found the beachcombers' site and am hoping he can identify these beans I found along the beaches here. I've recovered dozens, but only in the wintertime. I first noticed them in 1996 (a banner year) and each winter since, although they are getting tougher to find. I last looked in 2001 and came up with only a half dozen. A coworker from the Phillippines said they looked a lot like a variety of nut that grows there."

"The seeds are from a freshwater exotic plant, genus Trapa," replied Ed Perry. "These seeds have also been occasionally found in Florida. I think Bill Blazek found one down his way, and it caused quite a bit of stir at the Symposium. The plant is such an invasive exotic, it is not even allowed in Florida (illegal to bring it in). I am not sure of the species, but for sure they are Trapa seeds."





pictured above: North American *Trapa* sp. seeds found by David Kane.

pictured left: Top in view is *Trapa japonica*, collected by Izumi Hanno in Japan, below is *Trapa bicornis*, collected by Nicky Desvoyes in Brunei.



Drift Pigs. During March 2004, piggy banks continued invading Florida. Beachcombers began reporting them during November 2001. Here are the latest finds.

Seeking sea beans, Ed Perry beachcombed near Miami with Christopher Scott Boykin. "We went

down for a day (March 7, 2004) of sea beaning on Elliot Key in southern Biscayne Bay," Ed writes. "It is part of a National Marine Preserve. You have to get there by boat. It's open to the Atlantic on the east side (rocky shoreline, but where we found everything), and open to the bay on the west side of the 7-mile-long island. There was tons of trash, some of it there for years more than likely. We found beans galore, but each of us also found a plastic piggy bank! I also spotted a lobster pot with a 1991/92 tag attached to it indicating that Hurricane Andrew washed it up onto the island."

The following week, Chris discovered a third piggy bank on Elliot Key along with 94



seahearts. Later in March, **MariAnn Hannon** and **Bill Blazek** discovered two more porkers. "The big blue pig was found at John D. MacArthur State Park (March 29) in North Palm Beach after a week or so of strong E/ENE winds," writes Bill. "The yellow pig was found near Juno Beach pier (March 31). By this date, the strong winds had subsided, but huge swells were coming in."

During November 2001 through March 2004, Floridians reported 16 banks. Apparently, they were part of savings campaigns conducted in countries south of Florida. Having served their purpose, discarded porkers found their way to the sea. Judging from extensive bryozoan growth, a number of them drifted for quite a few years. "As we have no pictures from the beach sites," continued Bill, "I obviously can't show them to you in-situ, but we rinsed them only minimally, so you can get an idea of what the poor little things have been through! Our term for this 'as-was' condition is 'pig-situ.'"

Please continue reporting pigs from the sea.

Mud-combing. When his boat breaks down and he can't go beachcombing on remote Alaska shores, **Scott Walker** goes mud-combing. His favorite place? Beneath Ryus Float, Ketchikan, where merchant vessels have docked for more than a century. "The bottom in and around the Float is littered with junk and bottles," writes Scott. "Mud-combing is still good because each time a cruise ship docks, its propellers stir up the bottom and uncover new treasures." Scott likes being the first one down after the cruise ship season.

"My real treasure is finding china from the steamship era. The Alaska Steamship Company and the Canadian Pacific Steamship Company used to land here." According to Alaska Geographic Magazine (11, 4), in 1894, **Charles E. Peabody** and associates founded the Alaska Steamship Company, which enjoyed a near monopoly of freight and passenger service to Alaska. The Company continued passenger service until 1954 and hauled freight till 1971.

"The cup and saucer date between 1901-1928. I have china with two different styles. In the 1940's, the pharmacy on the Float burned down depositing large quantities of collectable bottles. Walking down the ramp to the cruise ships, you'll see a Gazebo. That's where the pharmacy burnt. Bars on this dock added another huge supply of bottles littering the bottom. In the 1940's and 1950's, we had

a bottling company for Coke and 7-Up. Some old Coke bottles say 'Ketchikan Bottling Company' (I've never found one)."

Beach Brains. Andira galeottiana washed ashore near Port Aransas, Texas, courtesy of **Jerry Sullivan**. On May 9, 2003, **Cathy Yow** found a battered brain bean on the west end of Galveston, Island, Texas. According to *The Drifting Seed* newsletter, beachcombers would give most anything to find one. Jerry prefers the moniker *Donovan's Brain* because the seed resembles the brain of the ruthless dead millionaire (Donovan) kept alive in a tank in the 1953 movie of the same name.

Native to southern Mexico, brain beans drift northward to Texas. **Ed Perry** found several along



South Padre Island, Texas, but most had pretty well decomposed. "I could tell they were fairly fragile and couldn't drift long," Ed e-mailed. "Imagine my surprise when I found a partial specimen last year in Melbourne and then saw another at the October 2002 Sea Bean Symposium found by **Michele Kelley**! I think these are the only two records of brain beans reaching Florida."

News and Notes

From Drifter **Billi Wagner**—an excerpt from a chapter about legends in *The Crofter and the Laird* by John McPhee, about a New Hebridean island off the Scottish coast:

The large seeds of a treelike West Indian plant called Entada scandens have drifted to the shores of Colonsay for thousands of years, and they have always been called fairy eggs. People once wore them around their necks, believing that this protected them from the evil moods of fairies.

editor's note: Entada gigas was once called Entada scandens.



Wim's blue/white painted coconuts:

Beachcombed in Holland were 7 blue/white painted coconuts, wrapped in a sari.—4 big, round nuts and 3 smaller ellipse shaped ones. We just fantasized about a weird jeu-de-boules-type-of game that you can play with them aboard a ship, at the deck, or something like that, and possibly this game-set fell overboard.

But we decided we better leave this to the specialists so I made this picture. Please gentleman can you tell us what it is? Send me your best guesses or the real answer to our question!

Best whishes from Holland—JACO, and Wim Kruiswijk e-mail

loer.9@hccnet.nl>



Fellow Drifter and beachcomber from Merritt Island, FL, John Beerensson, found a **Cathie's bean** (*Canavalia nitida*) since our last newsletter. Just to prove that others do find them, I visited John to verify his find and photographed it for all you skeptics! A hint from John: "never give up on the old wrack."

In March I received an impressive two-volume catalog titled *Fruits and Seeds of Genera in the Subfamily Faboideae (Fabaceae)*, by Joseph H. Kirkbride, Jr., **Charles R. Gunn**, and Anna L. Weitzman. What a wonderful piece of work! Data are derived from extensive sampling of the species

of 435 of the 452 genera of faboid legumes. This is a profusely illustrated, comprehensive work (1208 pages). While supplies last, single copies of this publication can be obtained at no cost from Joseph H. Kirkbride, USDA/ARS Systematic Botany and Mycology Laboratory, BARC West Room 304, Building 011A, Beltsville, MD 20705-2350, or by e-mail at <joe@nt.ara-grin.gov>.

Our keynote speaker at this year's upcoming Symposium will be **Dr. Richard L. Turner**, Associate Professor at Florida Tech. He will be presenting us a PowerPoint slide



presentation on noneother than our beloved fossil ghost crabs, *Ocypode quadrata*. Florida beachcombers have long been intrigued with these beach



treasures, and Dick is going to enlighten us all on their natural history. As you know, these were one of Cathie Katz' favorite natural treasures. You won't want to miss this! There was also a

little talk that **Wayne and Elaine Armstrong** may make the trek over from California for this year's Symposium. I am still waiting for confirmation on this, but if we all put our positive thoughts together, maybe we'll also be hearing from Wayne about traveling the jungles in search of the Mary's-bean vine! And if not, I am sure we'll see Wayne and his wife in the near future.

From **Mizuho Hanno** (Izumi's sister) in Japan: A new use for sea-beans—pet photography enhancement! Isn't this the most beautiful green iguana you-all have ever seen? Hey, that's a chocolate nickernut on her nose! Give me that!

Izumi Hanno is getting ready to leave for a 1-year trek across Southern Asia. She is doing this to experience, study and draw driftseeds. This lady is one great artist of driftseeds; I can only hope this all leads to a book from her someday. Izumi, best of luck on your travels (with Mr. Seabean!) and we still hope you are able to work-in the dates for this year's Symposium.

