



# The Drifting Seed

September 1, 1998

Vol. 4, No. 2

## THE DRIFTING SEED

A triannual *Newsletter* covering seeds and fruits dispersed by tropical currents and the people who collect and study them.

Distributed to more than 20 countries.

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Dr. Charles R. (Bob) Gunn, Advisor and Columnist  
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Pete Zies, Columnist

## 1998 Third Annual Sea-Bean Symposium!!!!

October 15 - 18, 1998 at the Community Center, 509 Ocean Avenue, Melbourne Beach, FL 32951  
(Symposium information on pages 14 and 15.)

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Thanks again to KINKO's in Melbourne, Florida for helping to print this newsletter.



We all **welcome home John Dennis, Sr.**, after his successful surgery in Maryland. I spoke with him while he was still in the hospital -- his closing words to me were, "I want to get out of here ... SOON." So, now he's home and once again writing his column, **The Lucky Bean** for our newsletter. In this issue, John writes, "Sea-beaning these days is taking on more and more of an international flavor." His son **John Dennis Jr.**, a researcher in the world's rain forests, will be attending this year's symposium with his father to add to that international flavor.

I mailed a few of our "I  sea beans" bumper stickers to **Dr. Charles Nelson** in England; he says that they are now on cars in Ireland, Cornwall, Norway ... and working their way across Europe.

My last contact with **Cathy Yow** of Texas was a distress call when she discovered her beloved brown nickernut tree had died while she was on vacation. "Woe is me. I tried to get those **noodle-heads**, Gunn & Zies, to listen to me months ago about this crazy tree I've been growing from an unidentified drift seed, but I couldn't seem to get their attention until just now. Now that it's dead, they are jumping up and down..." (*Noodle-head* is an American term of endearment meaning "brain made of pasta.")

Closer to home, here's a quick report about sea-bean activity on Florida's east coast between last May and now : No beans on our beaches. ... Sorry, but that's it, folks. We've had nothing but flat seas and clean beaches, as expected.

**HOWEVER!**... La Niña and tropical activity offshore are stirring up some action -- we're still holding onto our prediction that a great surge of beans, toys and treasures will arrive for the 1998 Sea-Bean Symposium. We're expecting the LEGOs® to arrive any day now. All Floridians: Keep your eyes open. (See page 13 for a beach toy update.)

**Pete Zies** and I are warming up for the symposium by leading a **beach walk with Ranger Maureen Picard of Canaveral National Seashore on October 3 at 10 am.** (For more information call Ranger Picard at 407 867-4077.)

#### Secret Committee: A Bean By Any Other Name ...

Speaking of **Pete Zies** and international things ... I've been the monitor of vigorous e-mails between **Dr. Charles Nelson** in England and Pete in Altamonte Springs about seed names. Instead of trying to describe the correspondence, I'll simply include pieces of a few descriptive messages that passed among us between June 5 and now ...

**Charles to Cathie:** "I have been looking through issues of *The Drifting Seed*, especially noticing those with the excellent "Simple Guides." But I am bewildered. WHO is inventing new names for drift seeds? Is there a secret committee working on it, deliberately changing all the names to confuse those of us who have always had sea beans, nickarnuts and horse-eye beans. What's this hamburger bean? I don't even know what a hamburger looks like, so why bother to change a perfectly good name? What's wrong with horse-eye bean? It's got nothing to do with being a vegetarian, I assume."

**Pete to Charles:** "I know they sell hamburgers in England! I ate one in London!"

**Charles to Cathie:** "Pete sounds ever so serious about his hamburgers ..."

**Cathie to Bob:** "Dr. Gunn, help! What should I do here? I was always taught to 'write to stir.'"

**Bob to Cathie:** "Keep on stirring."

**Cathie to Pete:** "Hey, Pete, look what Charles wrote to me: '... And what's wrong with nickar for *Caesalpinia bonduc* - or *bonduc* for that matter? For more than 300 years we've been calling them nickars, and no one has complained. And now, someone comes up with sea pearls ...!'"

**Pete to Charles:** "I have personally offended a few people before I could explain that "nicker" is an old English word for marble and that the seeds were used in children's games. While we're questioning names, I find 'hand grenade' too violent and prefer 'blister pod.'"

**Charles to Pete via Cathie:** "... Hand grenade is okay - we needed a name for that one, but please let's leave names alone. Taxonomists cause enough problems, without the rest of us muscling in and changing the good old well-established, time-honoured names ... And while on the subject, *Dioclea hexandra* is the correct name for the sea purse! (Sorry, but that's life!)"

**Pete to Charles:** "What the HECK...!?"

**John (Dennis, Sr) to Charles:** "There seems to be a proliferation of common names which is unfortunate. As I recently wrote to Bob Gunn, an effort should be made to use only the standard common name found in Gunn & Dennis ... I am opposed to such recent names as hamburger bean..."

**Charles to John:** "Amen, say I. Oh what a lovely war, I chuckle!"

**Charles to Cathie:** "But this hamburger thing ... well, the folk in Hamburg are probably insulted ... but why change horse-eye bean. Don't tell me that Florida folk don't know what a horse's eye looks like!"

Since Pete Zies' last comment was quite lengthy, we won't include it here, but we'll have it available in its entirety at the symposium. In the meantime, Bob Gunn's comments are on page 3.

## From Bob

I had a chance to read Charles Nelson's letter summarized on page 2 in the first paragraph of the "Secret Committee" dialogue, and I would like to note that: Scientific names (genus and species) and authors: These names are governed by the International Code of Botanical Nomenclature, and the genus and species names are written in Latin. **John Wiersema**, Nomenclaturalist, USDAARS, Beltsville, MD, has included the scientific names we use in our publications in the GRIN (Germplasm Resources Information Network) computer system. Anyone with access to the Internet can query GRIN for scientific names of our drift disseminules. John evaluates changes in these names. In the proposal by Nelson that *Dioclea hexandra* should replace our well-established *Dioclea reflexa*, John has been advised of the proposal, and has rejected Nelson's proposal. *Dioclea hexandra* cannot replace *D. reflexa*, because *D. reflexa* is not conspecific with *D. javanica*. *Dioclea hexandra* of Mabberley may strictly apply to *D. fergusonii* Thawites which is listed in synonymy of *D. javanica*. In addition there may not be a type for the Mabberley name.

**Common names:** These names are not governed by an international code and may be written in any language. There is an unwritten agreement that certain common names belong to a genus or a family, and when these common names are used in another genus or family, a hyphen (-) precedes the common name. For example, grass is used without a hyphen in members of the Grass Family (Poaceae), but if it is used outside the Grass Family the word grass is preceded by a hyphen: Nut-grass, Sour-grass, Yelloweyed-grass, etc. Aside from this, common names are just that, common names. Therefore the sea-bean (*Mucuna*) may be called the apt descriptive name, horse-eye-bean in Europe (it looks like the eye of a horse), but in Florida the perfect apt common name hamburger-bean is acceptable, because the seeds resemble miniature hamburgers. This is what an Editor does; Cathie, our editor, selects apt common names for the publications she edits!

**Nickar versus Nicker:** This is a problem between British English and American English. This can best be illustrated by the following quotations from Webster's New Twentieth Century Dictionary of the English Language Unabridged. 1956. p. 1132. Standard Reference Works Publishing Co., Inc., New York.

"Nickar nut See Nicker nut."

"Nickar tree See Nicker tree."

"Nicker nut A seed of the nicker tree: also called *Bonduc* seed."

"Nicker tree Either of two leguminous climbing shrubs *Caesalpinia Bonducella* and *Caesalpinia Bonduc* growing in tropics." And again, Cathie selects the spelling of the common names.

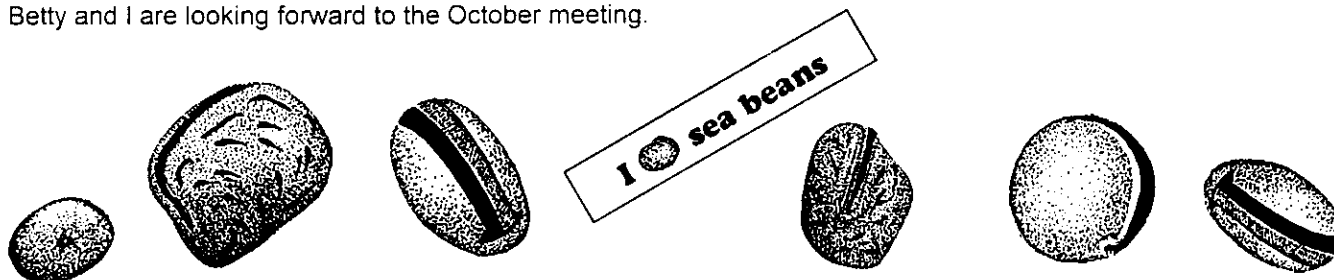
**Cathy Yow** is growing another of the unknown brown nickernut drift seeds from Texas beaches. This unknown has plagued me for years. I am sure it is a *Caesalpinia*, but which species? For more about the brown nickernut drift seeds from Texas beaches, see page 8, May, 1998, the article by John Dennis.

**Joe Kirkbride**, while in London, brought my plight about the incomplete ancient references for my English translations of the drift articles by Gunnerus and Gumprecht to the attention of John Flanagan, Librarian, Royal Botanic Gardens, Kew. John has given me major direct and indirect help on these references. I also want to thank Annelise Hartmann, Librarian, Copenhagen.

In an unexpected development, Betty and I went to Beltsville, MD over the weekend of July 31. This allowed me to meet with Joe about our legume book and my work with the seed and fruit morphology data bank that I have been creating, as well as teaching me more about the applications of the DELTA program system. I have 100 families more or less completed. It was pleasant to do some follow ups in the U.S. National Herbarium. And while this is a happy landmark, I must keep in mind that there are just over 300 more families to survey.

I have received via e-mail a draft of Charles Nelson's typescript for his book on New World drift disseminules that reach European shores. Charles has assembled a major contribution for us to enjoy.

Betty and I are looking forward to the October meeting.



"Attraction to natural environments is not simply a cultural phenomenon. There is evidence it is a deeper, biological urge."  
- Edward O. Wilson

## News About Nickernuts

by Pete Zies

At first glance, you might be less than excited about the nickernut. After all, it's only a little gray ball, right? If we pay a bit of attention to this small seafarer, however, much more comes to the surface. The nickernut most of us find is the gray nickernut, *Caesalpinia bonduc*, [shown below], and for many it is the *only* nickernut. This isn't true. The genus *Caesalpinia* contains about 70 species pantropically, and although many of these are decidedly non-nickernut-like, such as the Pride of Barbados, *C. pulcherrima*, our well known "sea pearl" does have close kin.

The yellow nickernut, *Caesalpinia major*, has long been recognized as the "other" nickernut no one ever finds. Few people have much experience with these rare seeds, but Dr. Wayne Armstrong of California has collected them throughout the Caribbean. Samples he sent us from Antigua disclose that these seeds are rarely true yellow, and they don't have the same flotation capacity as the gray ones. *C. major* can appear beige, brown, orange and anywhere in between these colors. This is complicated when we learn that the seeds of a number of other species (such as *C. wrightiana*, *C. divergens*, and *C. ovalifolia*) are very similar visually, and have been collected in the same geographical range.

Next we add some mystery by pointing out that a small number of unidentified canary yellow nickernuts have been collected in south Florida, which don't fit the *C. major* description. The mystery deepens when it is noted that a larger, though still limited, number of large, chocolate brown nickernuts have been found on southern U.S. and Mexican shores. These mystery brown nickernuts are easily distinguished from the color variations of the other species mentioned above. At least a part of the mystery may be solved soon, since our Texas beachcomber Cathy Yow was successful in growing a 12-foot plant from one of the brown nickernuts.

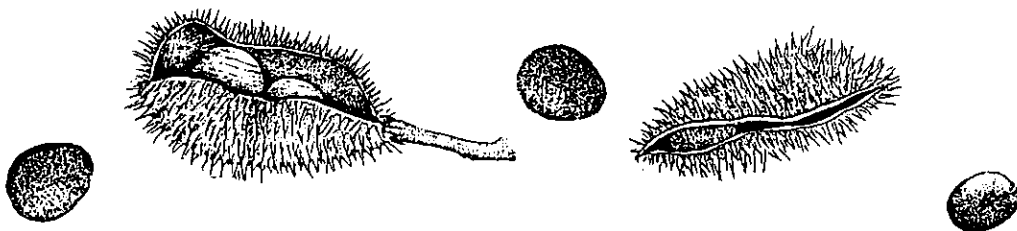
Efforts are being made to utilize samples from the plant to identify its species. Lest we label the gray nickernut dull by comparison, it should be noted there is news here too. Jeremy Smith, a contributor from Australia, has noted that a "giant" variety of gray nickernuts has been collected on the northern Australian coast.

Samples of these monsters, which are two or three times the size of the average nickernut, are also contained in Dr. Gunn's collection of Pacific material. It has not been established yet if these are a distinct species. Additionally, information from the *Flora of the Cayman Islands* (George R. Proctor, 1984, R.B.G., Kew) suggests that even the common gray nickernuts we routinely find may actually be two different species. This source suggests that pod and plant characteristics justify distinguishing a *Caesalpinia caymanensis* from *Caesalpinia bonduc*. Without the plants to examine, identification of the seeds may prove impossible, since both species produce gray or greenish-gray, subglobose seeds about 2 cm. long. Only by planting the seed, and then growing the plant until it produces pods (which would be without the thorns found on *C. bonduc*) would you know you had a *C. caymanensis*.

Before you begin to believe each nickernut you find is a new species, do keep in mind that our gray nickernut, *C. bonduc*, ranges from bone white (after baking in the sun) to tan/gray, blue/gray, green/gray, and yellow/gray, with shades in between. There is a wide range of coloration in this species, and environmental factors seem to affect the seed coat's color easily. I have even found some nickernuts which have apparently lain on the beach for quite some time without moving, that are very light gray on the exposed side but very dark gray on the side that faced the sand.

Writing this piece I came to realize that the more we learn, the more we realize how little we actually know. With about 70 species worldwide, who knows how many of them would be of interest to us? Keep your eyes peeled, since who knows what kind of nickernut you might find next!

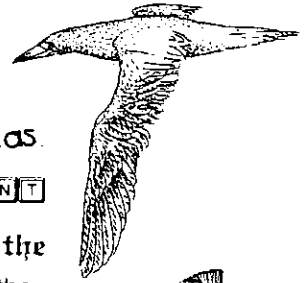
[Eds note: See "The Lucky Bean" article about nickernuts (*Caesalpinia* spp) by John Dennis, Sr. in the May 1998 (Vol. 4, No. 1) issue of The Drifting Seed.]



Evolution, according to François Jacob, works like "a tinkerer who does not know exactly what he is going to produce but uses whatever he finds around him ... to produce some kind of workable object."

## News Bulletin !!!

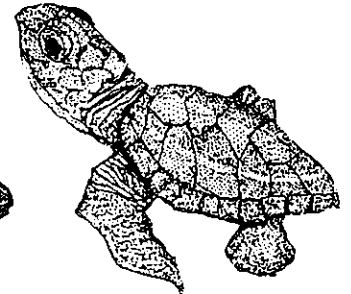
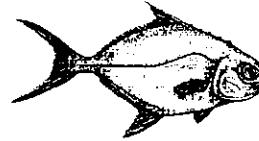
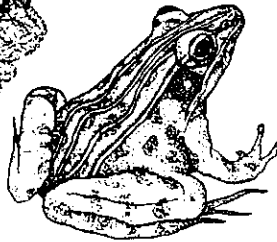
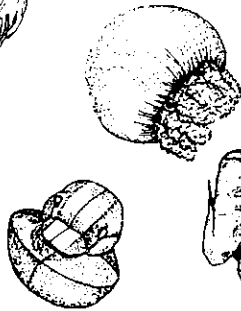
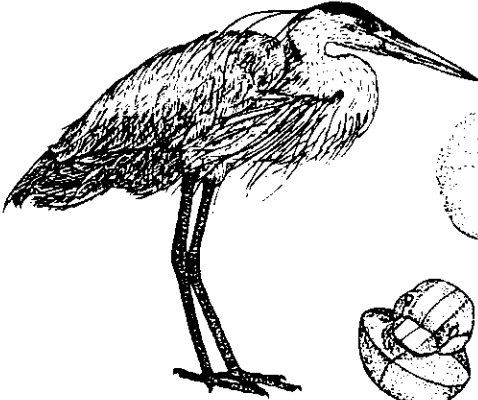
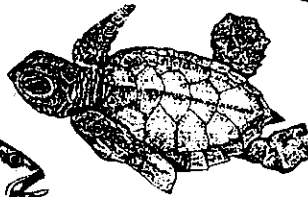
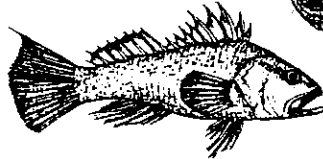
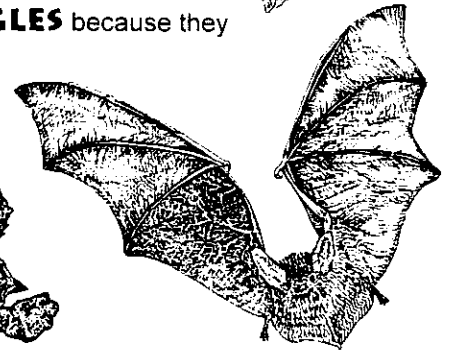
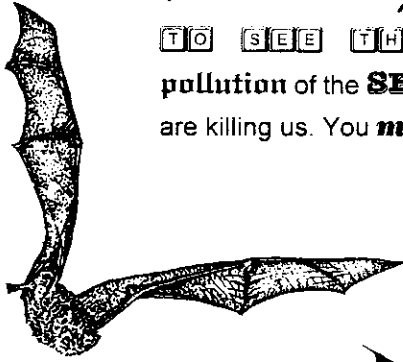
One of our Florida readers recently found a corked bottle with a message in it. The text reads as follows:



### DEAR Drifters,

**We** are the animals of the rain forest and the fish of the seas. We have taken your sea beans hostage, and if you **EVER WANT TO SEE THEM AGAIN**, you **must** do something to **stop** the pollution of the **SEAS** and the deforestation of the **JUNGLES** because they are killing us. You **must** act **NOW!**

Sincerely, The Fish and the **ANIMALS**



An emergency Executive Council Meeting of the Drifters was called to handle the crisis, and it has been decided to take the kidnapers at their word. Too much is at stake, and so every effort will be made to meet their demands. A two-part plan is being put into action immediately.

First, **The Drifters** have made contact with **Keep Florida Beautiful** and have signed a Marine Debris/Litter Removal Agreement with the **Adopt-A-Shore** program, overseen in Brevard by **Keep Brevard Beautiful**. We have adopted a stretch of beach at the south end of Spessard Holland Park in Melbourne Beach and we will conduct beach clean-ups at least four times a year. One will be during the **Great Florida Clean Up in April**, another during the **Florida Coastal Clean Up in September**, and the other two will be announced.

We need about **10 volunteers** so that the clean-ups can be done quickly and easily. Sea-bean shows and lectures will follow the clean-ups. Sign up sheets will be available at the symposium, or write to Pete Zies. Second, The Drifters have agreed to support the efforts of the **Rain Forest Preservation Foundation** and its companion Brazilian organization, **Fundacao da Preservacao da Floresta da Amazonia**. We have been provided with fund raising and educational material to provide to school children and others with which we can raise funds for land purchases, research, reforestation, and other worthwhile pursuits. Kits will be available at the symposium, or write to Pete Zies.

And to the Fish and Animals out there, if you are listening, "**Please give back our seeds!**"

"How we spend our days is, of course, how we spend our lives." - Annie Dillard

Sea-beaners in the not distant past were lone individuals living in diverse parts of the world who collected drift seeds without knowing anyone else who had the same hobby. This has recently changed dramatically in large part because of the Florida-based organization called The Drifters who publish this newsletter.

Think how the peripatetic Dr. H. P. Guppy would have benefitted if he had fellow Drifters to communicate with and artists like Cathie Katz and Pamela Paradine to draw for him. He made the rounds of the Pacific as a surgeon on one of his Majesty's ships and covered beaches over much of the rest of the world (missing Florida, however). His book, *Plants, Seeds, and Currents in the West Indies and Azores* published in 1917 was a ponderous, poorly written work with almost no illustrations. Yet it was almost the only publication that sea-beaners had to go to aside from Nathaniel Colgan's work on Ireland in 1919 and John Muir's work on South Africa in 1937.

Beginning with *The World Guide to Tropical Drift Seeds and Fruits* by C. R. Gunn and J. V. Dennis in 1976, there have been useful works published by Charles Nelson, Hiroki Nakanishi, Jeremy Smith, and others of the sea-bean fraternity.

Anyone planning to visit sea-bean beaches for the first time would be well advised to contact authorities who are familiar with the literature, custom's procedures, and caring for specimens. Pete Zies of Altamonte Springs, Florida is The Drifters' expert on identification.

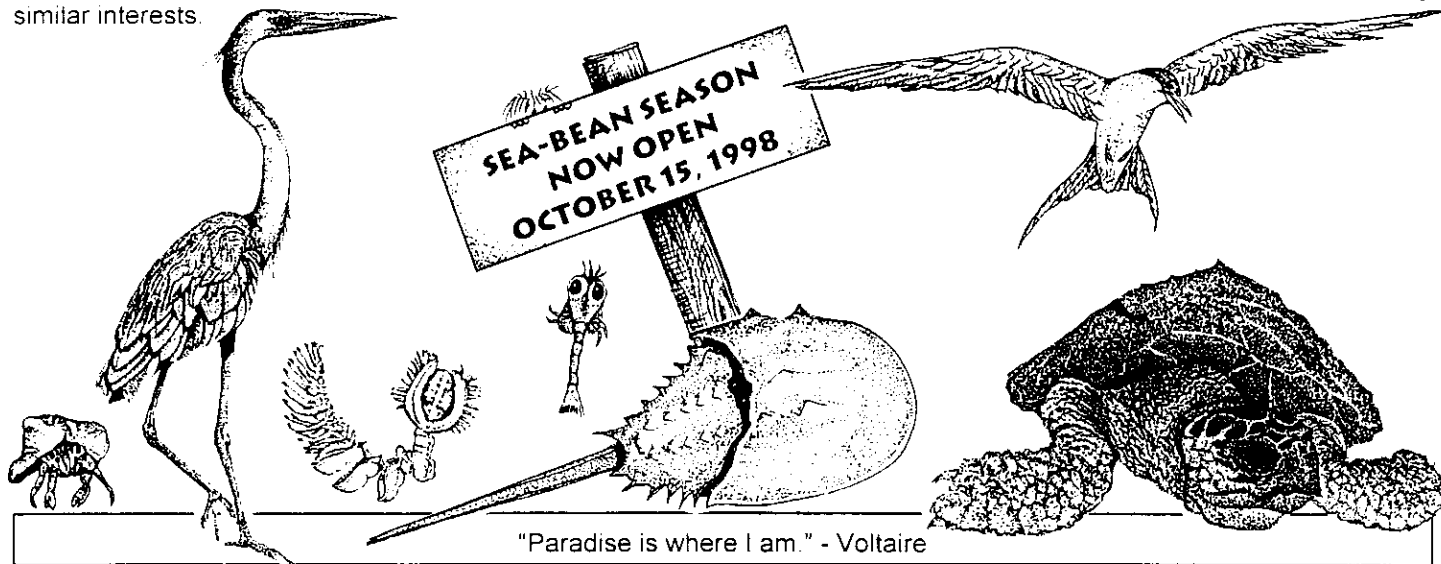
Literature sources to go to are proliferating. Jeremy Smith, professor at the University of New England in New South Wales, is preparing a book on Australian drift seeds. He writes that he is treating 70 or so species and that he has an accomplished artist. This book should be very helpful from the standpoint of identifying Indo-Pacific species.

Charles Nelson of Outwell, England and formerly director of the National Botanic Gardens in Dublin, Ireland, is producing a nicely illustrated small book that will treat tropical drift seeds that reach the shores of Western Europe.

Curt Ebbesmeyer of Seattle, Washington and a frequent contributor of The Drifting Seed newsletter, has been working hard on a book that will include drift seeds. He has recently made astonishing discoveries of tropical drift seeds reaching beaches in the Pacific Northwest. These beaches had been thought to be totally lacking in tropical debris. Curt has not divulged the main content of his book or when it will be published and by whom. However, he keeps close track of [human]-made objects that enter the ocean (mainly from container ships) and predicts where they will strand.

Cathie Katz of Melbourne Beach, Florida, and editor and publisher of The Drifting Seed newsletter has written four books on Florida natural history. Her latest, *The Nature of Florida's Ocean Life*, has material on tropical drift seeds. She not only illustrates her books and The Drifting Seed newsletter, with superb drawings, but has her own business, Atlantic Press, Inc. Moreover, she lives only a short step from the ocean. How could anyone be better situated to write about tropical drift seeds!

Sea-beaning these days is taking on more and more of an international flavor. It is bringing together people of different nationalities that have the same interests. There no longer need be isolated collectors with no contacts with others having similar interests.



**Unusual Drift Fruit From Costa Rica  
by Professor Wayne P. Armstrong**

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**Sea-Faring Pods From A Resinous Tropical Legume!**

My fondest memories of Palomar College Field Expeditions to Costa Rica are the many hours we spent beach combing along lovely Caribbean and Pacific shores. It is here that we discovered numerous tropical drift disseminules from nearby river deltas and far away rain forests. Although we were able to identify most of the drift seeds and fruits (at least to genus), there was one seed-bearing pod that always stumped our team. I now feel confident of its identification.

After consulting many references and several noted authorities on legumes, we finally solved the mystery drift fruit. The distinctive, woody, obovate fruit is flattened with raised veins resembling a thick, brown leaf. The dehiscent pods average about 2.5 to 4 inches (6-10 cm) in length. They come from *Prioria copaifera* Griseb., a tall tree in the Legume Family (Fabaceae: subfamily Caesalpinioideae). According to Allen (1977) the trees are very abundant on the Atlantic (Caribbean) coast of Costa Rica along tidal estuaries and ascending to about 1,000 feet, forming nearly pure stands in some places. This would explain the common occurrence of the large, flattened one-seeded fruits on Caribbean beaches, from Tortugero and Limon to Cahuita National Park. Like other large-fruited swamp species, such as *Carapa guianensis*, *Pachira aquatica* and *Mora oleifera*, the fruits are dispersed by ocean currents. According to Janzen (1983), the large seeds of these swamp species may be advantageous by rapidly producing tall shoots that place the seedling's first leaves above flood levels.

*Prioria copaifera* is listed under the generic and family lists in the Appendix of *World Guide to Tropical Drift Seeds and Fruits* by C. R. Gunn and J. V. Dennis, 1976; however, it wasn't described or illustrated. Most dichotomous keys to floras of the Caribbean islands and Central America require more than a seed pod to determine the species. Quite by accident I came across a line drawing of this most unusual legume in *The Rain Forests of Golfo Dulce* by Paul Allen, 1977.

According to Pete Zies (personal communication, 1998), Dr. Bob Gunn had a file on *Prioria copaifera* in his papers, including copies of pages from the *Flora of Jamaica* (pp. 123-124) which illustrate the bloom and pod, and describe the plant as being native to Jamaica and Central America. Dr. Gunn's seed collection includes several specimens of *P. copaifera*. Two large pods were collected at Fort Sherman in the Panama Canal Zone on April 20, 1925. Two additional pods, whose distinguishing features have been worn off, were collected on Isla Aves in the Caribbean in September 1972. A smaller, deteriorated specimen came from the Yucatan Peninsula, Mexico. In addition to Dr. Gunn's collection, the personal collection of Rondall Owens contains a pod of *P. copaifera* from the Atlantic coast of southeastern Florida. Thus it appears that the pods of *P. copaifera* have a fairly wide drift range in the American tropics.

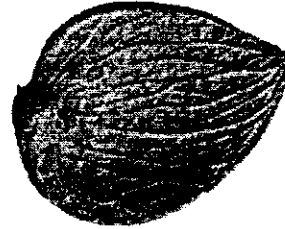
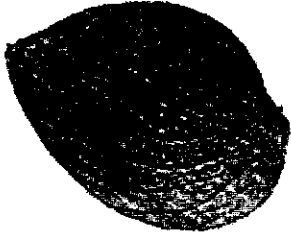
The trees that produce these pods are quite fascinating. Trunks of *Prioria copaifera* exude a copious black gum when cut, and the exposed heartwood is streaked with numerous dark resin canals that secrete the gummy resin. In fact, this species is one of the sources of a highly aromatic oleoresin called copaiba balsam (balsamo de copaiba). Oleoresins ("oil + resin") contain volatile terpenes called "essential oils" plus nonvolatile terpene resins. Because of the volatile, strongly-scented terpene component, balsams are used in perfumes, incenses and medicines. The well-known "Canada balsam" is a natural turpentine collected from resin blisters on the bark of *Abies balsamea*, a cone-bearing tree of the northern United States and Canada.

The specific epithet *copaifera* is also the generic name for another tropical leguminous tree (*Copaifera*). The genus *Copaifera* includes about two dozen species of evergreen trees native to tropical America and Africa. Some of these trees are commercial sources of balsam resins and of lumber called "greenheart." The genus *Copaifera* is derived from "copal" (a name for resin or balsam) and "fero" (to bear). Two of the most commonly used species of copaifera balsam are *Copaifera reticulata* and *C. officinalis*.

Another Central and South American "copal" is the raw resin from the West Indian locust (*Hymenaea courbaril*), a large leguminous tree widespread throughout the New World tropics. This species also produces a large legume pod that commonly washes ashore on beaches of the New World tropics. The trunk and roots of this tree exude a sticky, yellowish terpene resin that forms hardened globs which become buried in the soil around massive trunks of dead trees. The hardened subterranean resin known as East African copal, which is commonly used in bead jewelry, comes from *Hymenaea verrucosum*, a tree that is closely related to the West Indian locust.

In Chiapas, Mexico, Dominican Republic, and parts of Colombia and Brazil, the subterranean resin globs of ancient *Hymenaea* trees have transformed into amber through a remarkable chemical process requiring millions of years. During the polymerization process, the volatile terpenes escape and the nonvolatile terpenes bond together forming a hard plastic-like polymer that is resistant to natural decay processes and the ravages of time. Unlike copal resins and balsams, the amber is unaltered by organic solvents such as alcohol, acetone and ether. Although some copals will take a high polish, they contain volatile terpenes that gradually evaporate, causing the surface to become deeply crazed like the cracked mud of a dry lake bed.

So it appears that we finally have a name for the curious, flattened drift fruits that commonly float ashore on the beautiful beaches of Costa Rica and occasionally reach the Atlantic shores of Florida.



### References

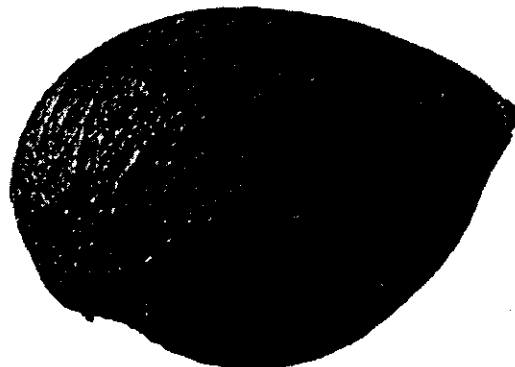
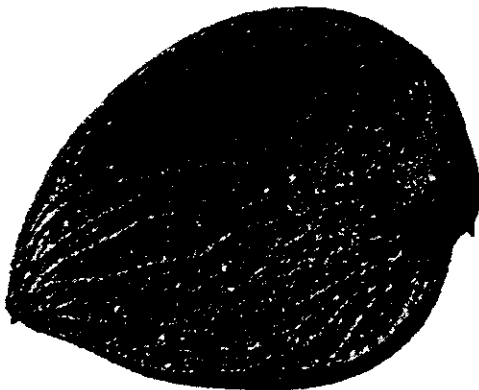
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Standley, P.C. 1937. *Flora of Costa Rica (Part I)*. Field Museum of Natural History Publ. 391, Chicago.

[The following was added by Bob Gunn:]

Gunn, Charles R. 1991. Fruits and Seed of Genera in the Subfamily Caesalpinioideae (Fabaceae). 408 pp. USDA/ARS Technical Bulletin 1755. Washington, DC. The fruits and seeds of the genus *Prioria* Grisebach with its one species, *copaifera*, are described and illustrated on pages 284-285. Photograph B on page 285 is a perfect match with the Armstrong illustrations. These drifting fruits do not possess the well developed embryos found in the much thicker viable disseminules.



"Home is where you hang your @." - Boyz in the Lab via Gary A. Pasler



by Dr. Charles R. Nelson  
Outwell, England  
tippitiwitchet@zetnet.co.uk

What do you do with the seeds you collect? Plant them and watch them grow? Put them into a museum? Keep them as mementos? Make them into necklaces? All these things happen to drift seeds, and more. Judging by past issues of *The Drifting Seed*, making jewellery from drift seeds is certainly a popular hobby, and some folk even make toys from the seeds. Ruth Smith (*The drifting seed* 4 (1) May 1998) mentions the use of *Entada* seeds for making snuff or match boxes, and as I have a small collection of these objects, I venture to describe them.

Vesta boxes were used last century to hold matches, particularly those called *vesta* which had stems made from strands of cotton encased in wax, with an incendiary head. This type of match was invented about 1833 by Richard Bell. The incendiary match had been invented in 1827 by John Walker, a chemist who lived in Stockton-on-Tees in the northwest of England – he called his invention a 'friction light.' A couple of years later, a similar device, called a lucifer was produced by Samuel Jones of London, and in 1836 the first patent for a friction match was obtained in the USA by Alonzo Dwight Phillips of Springfield, Massachusetts. All these inventions needed to be kept in a container, so *vesta* boxes were manufactured in a vast variety of shapes, forms, styles and material (Fresco-Corbu 1983). *Vesta* boxes were also known as *fusee* boxes and simply as matchboxes.

I do not know who first thought of using an *Entada* seed as the basic material for a *vesta* case, but as long ago as 1898 (exactly 100 years ago), Morris noted in his *Australian-English dictionary of Australasian words* that a matchbox bean was 'the hard seed of the Queensland tree (*Entada scandens*) [sic], of which match-boxes are made. This is perhaps the first printed record of this craft, and perhaps it was invented in Australia. However, there are examples of *Entada* *vesta* boxes bearing earlier hallmarks, Fresco-Corbu (1983) illustrates one hallmarked at Birmingham in 1884, so these boxes were also being made in England.

How were *vesta* boxes made? The common way seems to have been to slice off the 'top' of the seed – the dimpled part where the hilum is – and remove the cotyledons, leaving the empty seed-coat as a container. A metal rim with a hinged lid was then fitted over the opening, allowing the box to be closed, and a striking plate was fixed at the 'bottom.' The striking plate was another piece of metal with rough grooves against which the match could be struck. Sometimes a decorative shield or monogram was also fixed to the flat face of the seed. Fresco-Corbu (1983) illustrates one example with the monogram HM on the face, and a further example with a boomerang inscribed 'AUSTRALIA.'

I have one *vesta* case in this form. The metal attachments are not hallmarked, but the inside of the hinged lid has ST. SILV (i.e. sterling silver) on it. The shield is not engraved. I don't know its date, but it may have been made around the turn of the century.

My second *vesta* box is in a quite different style. The seed was sawn in half, across the 'equator,' and the two halves were fitted together with a silver hinge. There is a striking plate, probably made of steel, on one half. A handsome shield is decorated with the initial EAS (for EAF). One of the rims is hallmarked, but the marks are so worn that I cannot read the date. However the manufacturer's initials, J.F. are visible and the anchor (indicating silver assayed in Birmingham). These marks suggest that the maker was James Fenton, a Birmingham firm active in the early 1900s, and known to have produced *vesta* cases as sports trophies; two are illustrated in Fresco-Corbu (1983). The *Entada* is beautifully polished but is cracking.

Snuff, powered tobacco, was used by the natives of Haiti before the arrival of Columbus, and was being imported into Europe, as a medicine, by the late 1500s. By 1650 the taking of snuff was popular in Spain, Italy and Ireland. Snuff boxes have a longer pedigree than *vesta* boxes and were being made by this time too, although the first written use of the term 'snuff box' dates only from 1681. Again, I do not know when the first *Entada* snuff box was made, but we may assume that these large seeds were used as containers long before *vesta* boxes were required. Le Corbellier (1983), in her profusely illustrated account of European and American snuff boxes, makes no mention of *Entada* being used. And Ken Gosner, on the same quest, records that despite corresponding with many museums and perusing countless reference works on snuffboxes, he also failed to find any record of bean-boxes (Gosner 1985). Ken did "unearth" two elegant bottles made from *Entada* – one in Bergen (Norway) and the second in Reykjavik (Iceland) (both illustrated in Gosner 1985).

"People are always good company when they are doing what they enjoy." - Samuel Butler

What is undoubtedly a snuff box turned up in Penzance, Cornwall, in the 1980s, and the tale of the pursuit of this intriguing object was told by the late Ken Gosner (author of *A field guide to the Atlantic seashore*) in his shaggy-bean article in *Underwater naturalist* (1985; this was reprinted elsewhere, e.g. *Maine antiques digest*). In concert with Ken, I managed to acquire the Penzance snuffbox, and I still have it in my collection. The mode of manufacture is again different. A hole was made on one 'face' of the sea bean, and the cotyledons were removed. A hinged, silver, flap-like lid was then secured over the hole. Sadly the box is now in two pieces because the seed has completely split. The decorated lid, is not hallmarked. From the style of decoration, I suggest that it was not manufactured in Europe, but may have been imported.

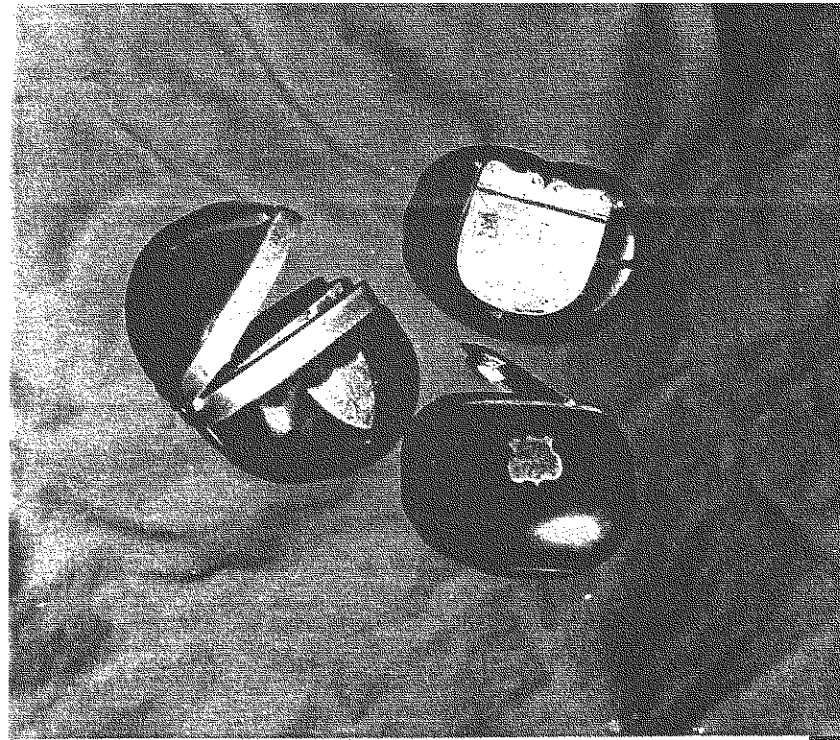
The final example in my collection is a modern box, made from an *Entada* that was collected early in 1988 on the shore of Inishboffin, an island situated off the coast of County Donegal in the northwest of Ireland – in fact this is the only truly genuine drift-seed box in the collection because the seed from which the other boxes were manufactured may never have even been dipped in sea water. My modern box was crafted by hand on Inishboffin by Neal MacGregor. He sliced open the seed, and mounted the two halves of the seed coat on silver so that when opened the inside is silver. The box is fixed by two small engraved clasps, attached to the lower half, that snap on to two button-clips on the upper lid. The sterling silver box, hallmarked in Dublin 1989, was one of four that Neal made, but I have no idea where the other three are now.

#### References

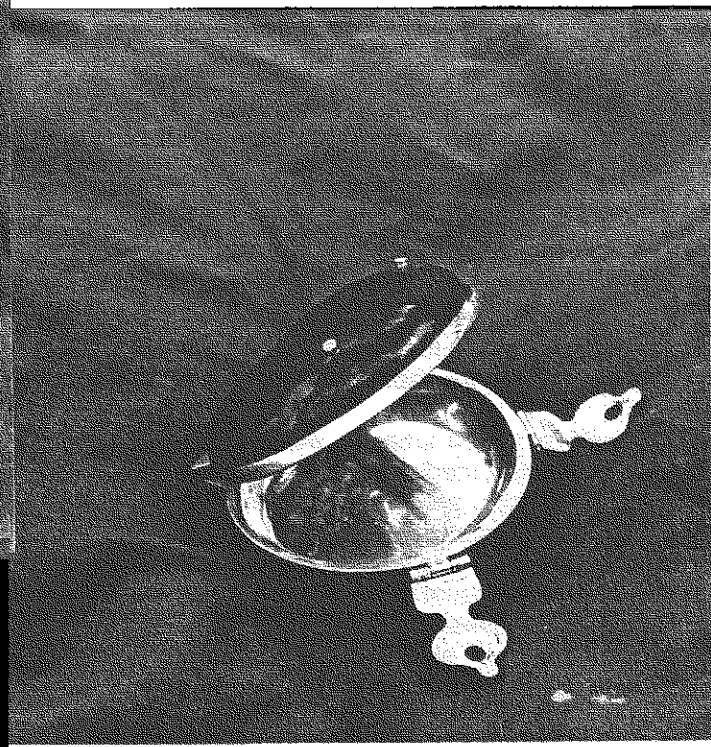
Fresco-Corbu, Roger. 1983. *Vesta boxes*. Guildford, Lutterworth Press.

Gosner, Kenneth L. 1985. The Penzance snuff box. *Underwater naturalist* 15 (3): 7-12.

Le Corbeiller, Clare. 1983. *European and American snuff boxes 1730-1830*. London, Chancellor Press. [originally published in 1966].



Above: Penzance snuff box (upper right) with two vesta boxes.



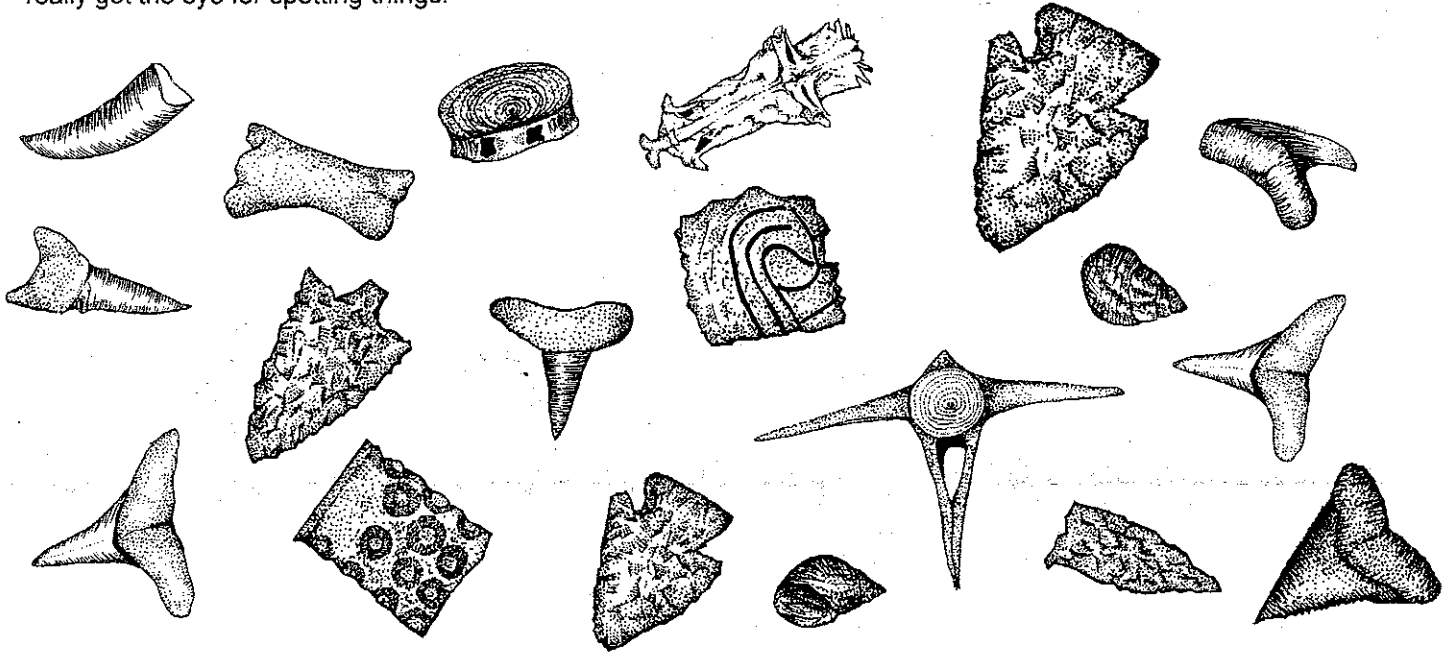
Above: Snuff box made from *Entada* found on the shore of Inishboffin.

## Thoughts on Having the "Eye"

by David Williams  
winginit@erols.com

No matter what the object, as collectors we share a passion to find and showcase a multitude of things that are precious in the eye of their beholder. Our individual methods are diverse, but we have one thing in common. When we set our minds to look for something, we have the "eye."

As a boy growing up on a tobacco farm in the piedmont of North Carolina, I realized at an early age that I was a collector. Walking between the freshly plowed rows behind my father and his mule, I discovered treasures that had been passed over by two older siblings. Our land had been inhabited by Indians and what had just been rocks to my brother and sister were rare and precious pieces of history to me. I found arrowheads of all shapes and sizes, various stone tools and shards of pottery. All that I'd have to see was a tip or edge of something to know that it needed to be plucked from the dirt and checked. I'd pull out my trophies at the end of the day and my mom would say, "Son, you've really got the eye for spotting things."



This knack for finding things branched into anything that interested me. Lost change, sea shells, sharks' teeth and most recently sea beans. Part technique, part patience and mostly desire, every good "beaner" knows what I'm talking about. You'll look for something and once you find one, others begin to materialize. I went for two years before I found a candle nut (*Aleurites moluccana*). Now I have enough of them that they are no longer on my "special find" list. I had a difficult time finding my first Mary's bean (*Merremia discoidesperma*). But since that one, I have added many to my collection and even had the good fortune of picking up more than one in a single day.

Every time we see something new, we make a mental note of it. As children we see countless things for the first time. By analyzing the uniqueness of each unfamiliar object and comparing it with the other things in our memory, we start a "cerebral" collection. Each object holds a space in our minds and is then used to compare and contrast with other things. We look at new objects and make the decision to give them a new space or call them one of the same.

Collectors scan areas trying to pull out familiar colors and shapes from the mass. As with any skill, we hone that side of our brain. As we walk along, we visualize the things that we wish we could find. If we have been lucky enough to find that certain something already, our mental images are much crisper, thereby increasing our chances of picking out more of the same.

Finding and showcasing an impressive collection stimulates the thing that takes up an even greater portion of our brain -- pride. All in all, collectors are a curious bunch. Or should I say, "curio bunch?" We are all in effect, self sustaining, walking museums. Without us, people would be forced to go to great lengths and expel huge amounts of labor doing the tasks that we call *fun*.

"It is the soul's duty to be loyal to its own desires. It must abandon itself to its master passion." - Rebecca West

Recent publications:

**Chater, A. O.** 1998. Drift seeds in Cardiganshire VC46. *Botanical Society of the British Isles Welsh Bulletin* 63 (Spring 1998): 15-17. [Records of four species, *Cocos nucifera*, *Ertada gigas*, *Lathyrus japonicus* subsp., *maritimus*, *Mucuna* cf. *sloanei*, from the west coast of Wales.]

**Mørkved, Brynhild.** 1998. Fra kninne til kvinne. *Ottar* no. 220. This issue of *Ottar*, published by Tromsø Museum, Norway, contains articles in Norwegian about medicinal plants, and illustrated among the many native Norwegian trees and herbs are (p. 45) the drift seeds, *Ertada gigas*, *Dioclea reflexa* and *Mucuna sloanei*, with a brief account of their use in folk medicine.

Also from **Brynhild Mørkved**: "What about drift-seeds on stamps? ..."

"I thought it would be amusing to try to find out what drift-seeds, or at least their parent plants, were shown on stamps. Stamps showing flowers and plants represent perhaps the most widely distributed examples of botanic art, and given that drift-seeds are also widely distributed plants, what better idea for kids to collect drift-seeds and stamps. I have not had much success, but this is a start. Perhaps others can add to the list:

*Barringtonia asiatica*: Cocos (Keeling) Islands 1989 40c

*Caesalpinia bonduc*: Cocos (Keeling) Islands 1989 50c

*Cocos nucifera*: Wallis & Futuna 1994; Vanuata

*Ipomea pes-caprae*: Aitutaki/Cook Islands

*Terminalis catappa*: Cocos (Keeling) Islands 1989 90c; Anguilla 1997 60c."

From **Dr. Charles Nelson**: I have completed the text for a book, *Sea Beans and Nickar Nuts: A Handbook of Exotic Seeds and Fruits Stranded on Beaches in Northwestern Europe*. The handbook will be illustrated with Chinese ink paintings of the seeds by Mrs Wendy Walsh, and sketches of the living plants by Alma Hathway. The handbook will be published next year by the Botanical Society of the British Isles, BSBI Publications (M. Perring), Green Acre, Wood Lane, Oundle, Peterborough PE8 5TP, UK (fax + 1832 274 568). The BSBI has an excellent publications programme, and has published handbooks on several "difficult" groups of plants native in Ireland and Britain.

**G. C. Cadée** 1998 Raadselachtig zaad van Texels strand geeft naam prijs. *Het Zeepaard* 58: 97-100. [Text in Dutch with English summary. The identification of the true seed of the coconut found on the beach of Texel, The Netherlands.] The summary reads as follows: "After long searching, a mysterious large, brown polished 'seed' found on the beach of Texel could be identified as the kernel (endosperm) of a coconut. An excellent picture was found in Gaertner (1791, pl. 5). Unexplained is why a coconut in this form, without its wooden enclosure, did reach our beach. If someone can help to solve this riddle, please contact the author [Gerhard Cadée] (Cadee@nioz.nl)" [or write to the address below].

Also from Gerhard Cadée: "I very much like Bob Gunn's contribution on "The Book" [Drifting Seed Vol 4, No 1]" Gerhard writes that he knows of a facsimile of "The Book" available in Amsterdam [three volumes with all 225 plates] for about \$200, far less than the \$3500. set mentioned for the original. Anyone interested, contact Gerhard Cadée, Netherlands Institute of Sea Research, PO Box 59, 1790 AB den Burg, Texel, Netherlands.

**Dr. Stephen Leatherman's** latest book, *America's Best Beaches* will be available at the Symposium. Readers can also order through Coastal Publications by calling toll free 1-888-TOP-BEACHES or go to [www.topbeaches.com](http://www.topbeaches.com).

Thank you to **Dr. Steven Crow** in **Richardson Texas** for sending the "Seashell Architecture" CDs to Cathie Katz and The Drifters. They are beautiful X-rays of shells that Dr. Crow collected while in Hawaii. The CDs show his photographed, X-rayed, and identified collection (with music), apparently one of the largest in the world!

**Seed Collection News**

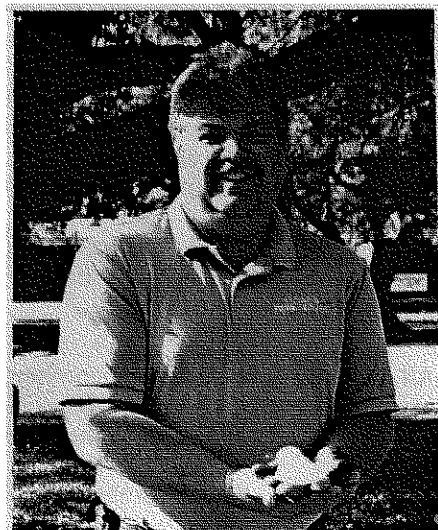
(Our drift seed collection, which was sent to Florida last year by Dr. Gunn, is being curated by Pete Zies)

Sincere thanks to the following people for their donations:

**Aziah Haji Ahmed of the Brunei Museum** of Natural History in Darussalam has sent us a checklist of the drift seeds held in that museum's collection. He lists 25 families and 65 species from their beaches which he says "tend not to be abundant on our shores." He will be donating specimens to our collection in the future. Also donating seeds to our collection are: **Hugh Akotoye of The University of Cape Coast, Department of Botany in Ghana** who has written Pete Zies, advising that he will be submitting a sampling of drift seeds found on Ghana's coast for inclusion in the World Guide's revision. He will contribute his help with our revision project. **Xander van der Burgt** from the **Netherlands** recently donated 103 different drift seed species that he collected while conducting botanical field research in Cameroon on the west coast of Africa. His contribution is a major addition to our collection's variety of African specimens. Thanks Xander! Also, **Mark Lund** from **Oregon**, **Tally Powel** from **Galveston, Texas**, **Bob Coombs** from **Wailuku, Hawaii** for donating seeds from their shores.

**Beach Toy Updates**

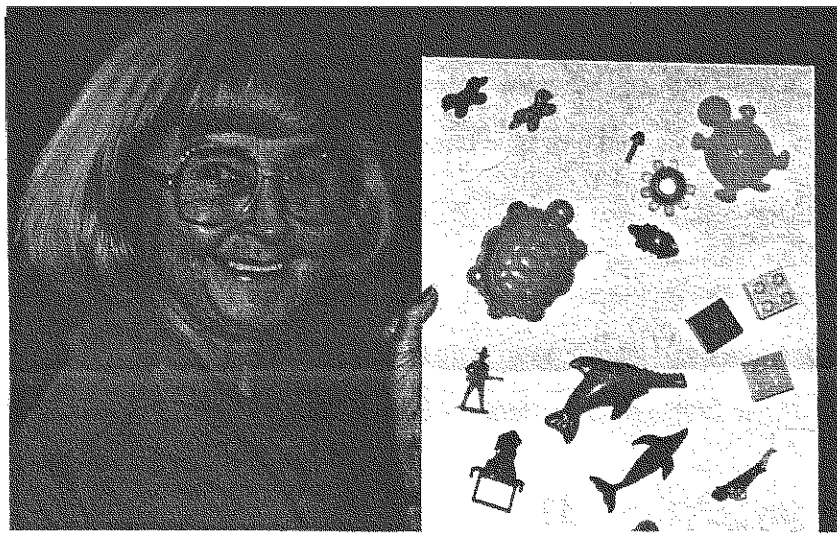
Park Ranger Ed Perry sent photographs to The Drifting Seed of several **plastic duckies**, turtles, and beavers found near Sebastian Inlet, Florida since 1995 and asked if they could be from the 1992 cargo spill out of Hong Kong. **Curtis Ebbesmeyer** commented: "I hate to put a damper on things, but it doesn't appear that Ed Perry's toys are from the Pacific spill. That spill took place in 1992. Finding the toys in 1995 would require too quick a trip around the Pacific to Bering Strait (~2 years), and across the Arctic Ocean (5 years quickest), and then around the North Pacific to Florida (another 3 years). About the quickest transit from the spill to Florida would be 10 years making the first arrival in 2002 ... Now I'm wondering if there was a toy spill in the North Atlantic. Ask Ed to keep a count of the various types." [Ed will have his toys on display at the Symposium as well as a "natural mystery" object that needs identification. Ed will also have trivia questions to present to beachcombers.]



Above: Sebastian Inlet Park Ranger Ed Perry holding plastic turtles and frogs

Also, **Delone Stone** sent several letters and photographs to The Drifting Seed, describing her beach finds in south Florida this year, including LEGO® toys and plastic turtles. The information was passed on to Curtis Ebbesmeyer in Seattle, for his assessment. Delone wondered if her plastic toys could be from any of the ship spills in recent years? Curtis replied, "This is going to be like identifying sea beans ... Difficult but not impossible." The LEGOs® couldn't have reached Florida during the time Delone found hers. Curt will be available throughout the Symposium to examine all the toys that the many other beachcombers have been collecting.

Shown left is Delone Stone of Ft. Lauderdale with some of her recent beach finds.



All beachcombers, remember that some of the items from the *Cita* (ran aground on March 26, 1997 off the southwest shore of England near the Isles of Scilly) were: 1500 toilets seat lids, over 18,000 new car tires, 25,000 computer mice, a million plastic shopping bags, 7.5 tons of Actionmen toys. Curt Ebbesmeyer will have a complete list available at the Symposium this year. Curt calls the Scilly Isles, "one of the Atlantic's infamous ocean graveyards." [Scilly is pronounced 'silly.']

Across the Atlantic Ocean, in the Bahamian Islands, another junk graveyard, known as "**Junk Beach**" gathers tons of drifting stuff. **Patti and Mark Gonsalves** own and operate **Watercolours Cottages in Abaco, Bahamas**, described as "a tropical island escape" ... and the accumulation of beach treasures on Junk Beach as "mountainous." They invite all visiting Drifters to take a look at this amazing pile of ocean debris. Thanks for the invitation to see the junk -- and the suggestion to hold a future Symposium in the Bahamas! Contact Patti and Mark at 407 724-1918 or [www.iu.net/watercolours](http://www.iu.net/watercolours).

**And More News**

**Andrea and Dave Porter**, formerly of **Satellite Beach, Florida** have moved to **Ocean City, New Jersey** where they opened **THE SEA BEAN**, "A Seashore Bed and Breakfast Cottage conveniently located one block from the beach and boardwalk." Andi encourages all The Drifters to stop by when we visit New Jersey! Write to them for their brochure. (The Sea Bean, 1330 Wesley Avenue, Ocean City, NJ 08226; TEL: 609 399-1956). [Drifters, Remember that Cathie Katz found her first sea bean in Ocean City 40 years ago!!]

Cathie's new site [www.seabean.com](http://www.seabean.com) is being designed by **David Williams in Virginia** and will be ready by mid-September.

[Eds note: **The News and Notes**, **Recent Publications**, and **Collectors' Gallery** merged for this issue because of limited space. Also, from lack of space, we couldn't answer everyone's questions about their beach treasures. ]

"Trash is in the eye of the beholder." - Dr. Curtis Ebbesmeyer

**Schedule of Events for The 1998 International Third Annual Sea-Bean Symposium  
at The Community Center, 509 Ocean Avenue, Melbourne Beach, Florida October 15 - 18, 1998**  
(The Community Center is at the river park, three blocks west of the ocean.)

October is still HURRICANE SEASON in Florida, so our schedule is at the mercy of powers beyond our control. Hurricanes are wonderful for beaning but can be dangerous for beachwalkers. If any of our beachcombing activities are cancelled because of severe weather, we'll meet in the Community Center or **follow evacuation procedures to the mainland.** (Hurricane information will be available at your hotel and at the Community Center).

Seed collections and beachcombing experts will be on hand at the Community Center throughout the symposium to help identify sea-beans and other beach treasures.

### Thursday, October 15

**All day:** Open beachcombing/casual get-together. As visitors drift into town, we'll gather at **Ocean Avenue Park** (at the beach) **OR:** since many of us will be meeting for the first time, Cathie Katz, Sue Bradley, and Marge Bell will be available at the **Community Center** to introduce each other and help set up displays.

**7 pm - 9 pm:** Beachcombing displays on view. Experts will be available to answer beachcombers' questions.

### Friday, October 16

**8 am to noon:** Early morning beachwalking (contest warm-up). Meet at Ocean Avenue Park where Pete Zies, Curt Ebbesmeyer, and other experts will be available to answer questions. **AND/OR:** Meet at the Community Center where Cathie Katz, Bob Gunn, John Dennis and other experts will be available to answer questions. All displays available for viewing.

**1 - 5 pm:** **Presentations** (Each one will be 20 to 30 minutes with breaks in between for viewing and questions):

- 1 pm: Ed Perry:** Beginning Beachcombing
- 2 pm: Cathie Katz:** Sea-Bean Polishing
- 3 pm: Ruth Smith:** Seed Jewelry From Around the World
- 4 pm: Dr. Curtis Ebbesmeyer:** Tropical Seeds on the West Coast

**7 - 8 pm:** **Pete Zies:** Bean-A-Thon guidelines and sea-bean identification slide show.

**8 - 9 pm:** **Meet the experts:** Round table discussion, followed by audience questions. Panel includes David Cox, John Dennis, Curtis Ebbesmeyer, Bob Gunn, Cathie Katz (moderator), Stephen Leatherman, Ed Perry, Ruth Smith and Pete Zies.

### Saturday, October 17

**8 am - 10 am:** **1998 BEAN-A-THON.** Pete Zies will provide guidelines at Ocean Avenue Park.

**10 am - noon:** Display, judge and record BEAN-A-THON results at the Community Center (awards at 7 pm)

**1 to 5 pm:** **Presentations** (Each one will be 20 to 30 minutes with breaks in between for viewing and questions):

- 1 pm: Cathy Yow:** Creating from Nature
- 2 pm: Dr. David Cox:** Ocean Treasures
- 3 pm: David Williams:** Drawing from Nature
- 4 pm: Dr. Stephen Leatherman:** America's Best Beaches

**7 - 7:30 pm:** BEAN-A-THON awards and certificates presented.

**7:30 - 9 pm:** Panel with **KEYNOTE SPEAKER Dr. Stephen Leatherman**, also known as Dr. Beach, author of *America's Best Beaches* and Director of the International Hurricane Center at FIU in Miami. Dr. Beach will be available through the symposium to sign books. Also on the panel are David Cox, John Dennis, Curtis Ebbesmeyer, Bob Gunn, Cathie Katz (moderator), Ed Perry, Ruth Smith and Pete Zies. The panel will be available to answer questions as time permits.

### Sunday, October 18 (Closed to the public)

**8 - 10 am:** Beachwalk/breakfast/final display viewing

**10 - 10:30:** Photo session with Jim Angy. ALL DRIFTERS will be in front of the Community Center by 10.

**10:30 - noon:** Drifters' business meeting, including World Guide book revision discussion

**12 - 1:30:** Lunch

**end** **Unfinished Business - end of Symposium**



Marge Bell of Melbourne, Florida is available to answer travel, hotel and hospitality questions.

Call Marge at 407 727-8256

or fax: 407 727-1763

or e.mail: jasperbell@mindspring.com

Melbourne International Airport is about 4 miles from Melbourne Beach; Orlando International Airport is about 74 miles from Melbourne Beach.

**Easy directions from either Melbourne or Orlando airport to Melbourne Beach Community Center:**

- ☛ Take U.S. Hwy 192 east to Melbourne.
- ☛ After you cross the bridge, turn right at the first light (Riverside Drive).
- ☛ Stay on Riverside Drive for 1.7 miles. (Riverside Drive becomes Ocean Avenue after the bend.) You'll see the Community Center on the right. (A picture of the Community Center is shown on the T-shirt below.)

Most visitors last year stayed at the Sharrock Shores Resort and were extremely pleased with the convenience, prices, and service. Once again, Mr. Sharrock is offering to be our host hotel with a 15% discount for the Drifters; when you call, let the desk know you are attending the Sea-Bean Symposium.

**Sharrock Shores Resort (407-723-3355)**

(Reservations: 1-800-820-1441)

1441 S. Miramar Ave (A1A)

Indialantic, FL 32903

(0.8 mile north of Melbourne Beach)

on the beach, pool, kitchenettes, close to shops and food. Suites are \$60 (\$80 without discount).

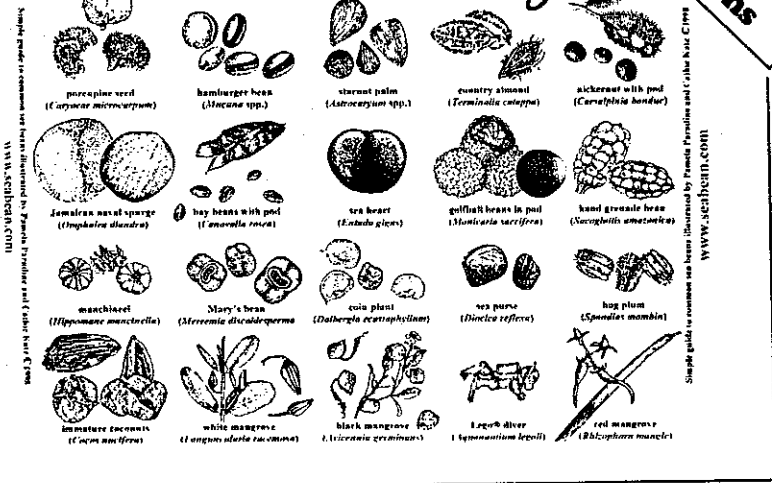
**1998 Sea-Bean Symposium T-shirts**

and bean bags (totes) will be available for \$15 each. All proceeds will be used to help pay for *The Drifting Seed*.

If anyone would like to order a specific size T-shirt (or would like one by mail), please write or e-mail Cathie Katz to let her know how many and what sizes you want before September 15; otherwise the T-shirts will sell "first-come-first-get" at the symposium. Tax is included, but add \$2. per item to cover mail costs. (Overseas add \$6. per item.) Bumper stickers are available for \$1 each. Make checks payable to Atlantic Press.



**The Bean Bag**

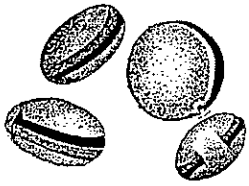


T-shirts are white, short-sleeved, 100% cotton. Sizes are medium, large and Xlarge. (XXlarge and XXXlarge are \$2 extra.)

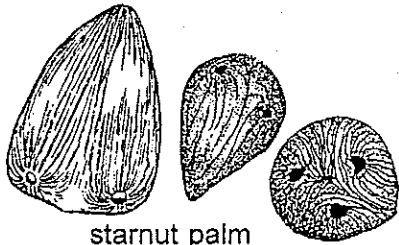
**BEAN BAG** linen tote bags (17" x 13") (design shown left)

# Simple Guide to Common Drift Seeds

(Illustrations by Cathie Katz and Pamela J. Paradine)



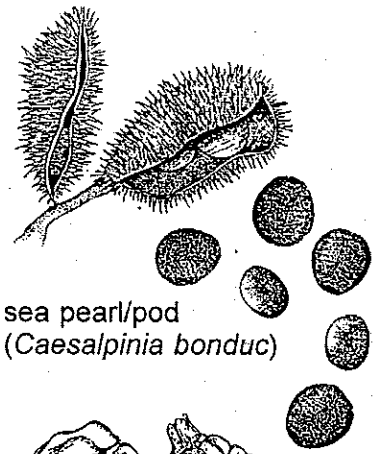
hamburger bean  
(*Mucuna* spp.)



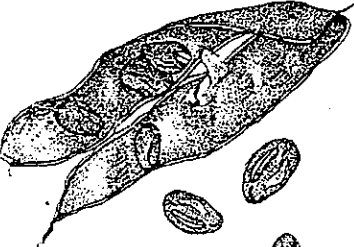
starnut palm  
(*Astrocaryum* spp.)



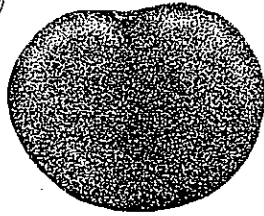
country almond  
(*Terminalia catappa*)



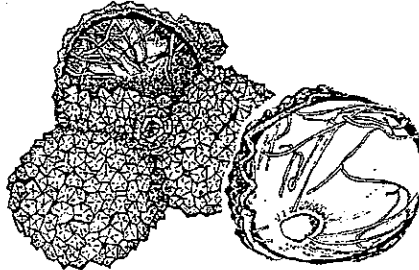
sea pearl/pod  
(*Caesalpinia bonduc*)



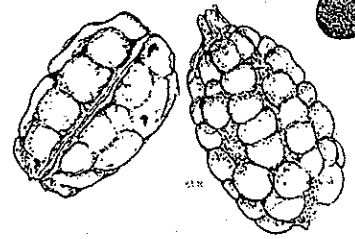
bay bean/pod  
(*Canavalia rosea*)



sea heart  
(*Entada gigas*)



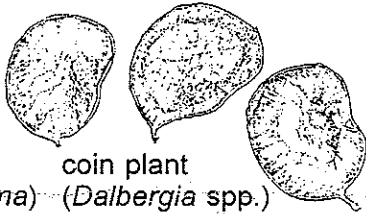
golfball/pod  
(*Manicaria saccifera*)



hand grenade  
(*Sacoglottis amazonica*)



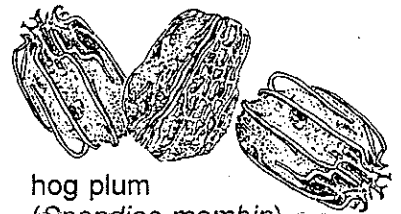
Mary's bean  
(*Merremia discoidesperma*)



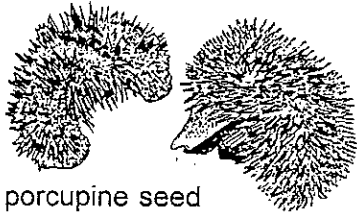
coin plant  
(*Dalbergia* spp.)



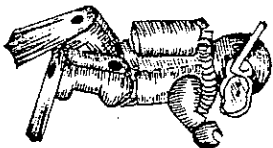
sea purse  
(*Dioclea reflexa*)



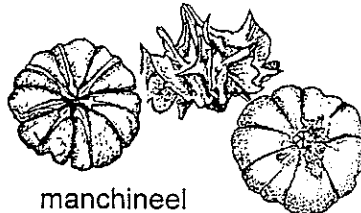
hog plum  
(*Spondias mombin*)



porcupine seed  
(*Caryocar microcarpum*)



Lego® diver  
(*Aquanautium legoii*)



manchineel  
(*Hippomane mancinella*)

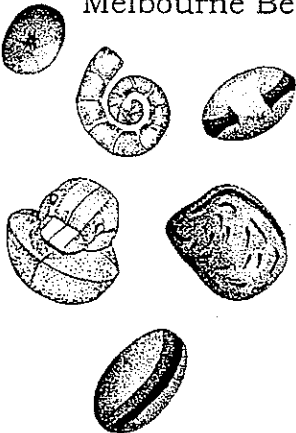


white/black/red mangrove  
(various genera)



## The Drifting Seed

PO Box 510366  
Melbourne Beach, FL 32951



stamp  
here