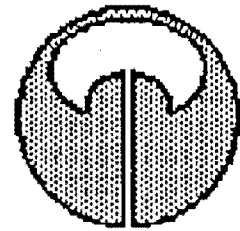


The MARGARETOLOGIST

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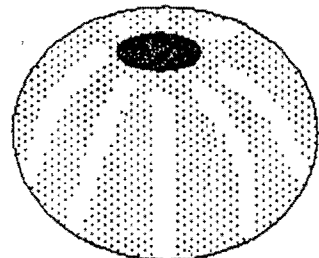
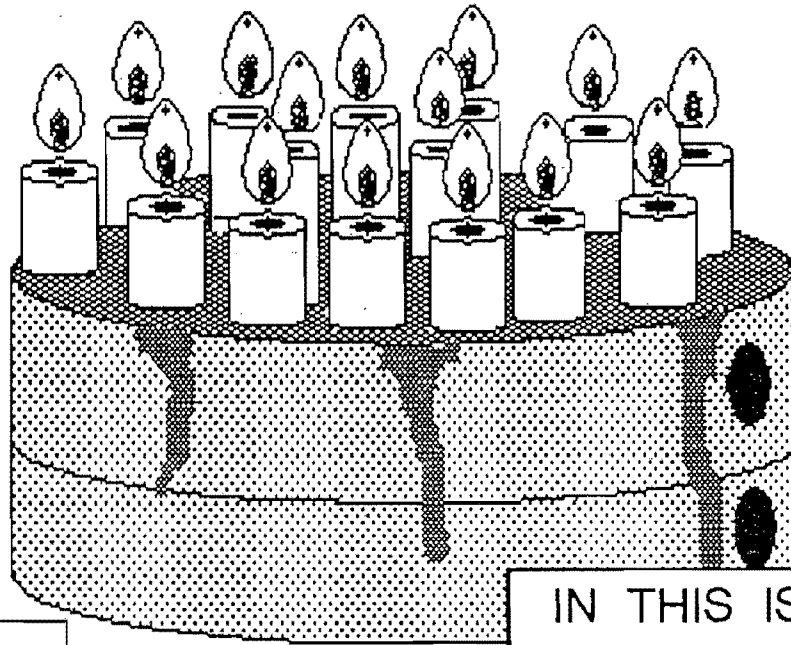
15 YEARS OF SERVICE

The Center for Bead Research is an outgrowth of the Bead Research Bureau, founded in 1979 with Lapis Route Books and Cornerless Cube. A permanent location was planned in 1984 and operating the next year with a library, study collections, a print shop and a photo studio in place. The first issue of the *Margaretologist* was published in the same year.

We have grown into an internationally recognized institution. Scholars and bead lovers from around the world avail themselves of our facilities. We have an expanding program of publications, lectures and workshops and co-sponsor Bead Expos and the Horace C. Beck Fund.

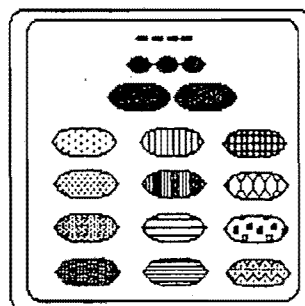
Much of this is due to the backing of our Members, Patrons and Supporters. We thank you deeply. This issue, full of recent work done here at the Center, is dedicated to you.

For Puzzlers:
How many
beads of what
kinds were
used to make
the Birthday
Cake?
Answer on
p. 14.



GOOSEBERRIES,
GOOSEBERRY BEADS
& THE SLAVE TRADE

THE BEAD SAMPLE CARD PROJECT



IN THIS ISSUE

Eye of the Needle/Calendar	2
Bead Sample Card Project	3
Gooseberry Beads	5
More on South India Stone Beadmaking	7
First Horace C. Beck Grant	8
Jimi Kola - Our First Intern	9
New Beadmakers	10
Bead Alert	10
Short Notes	11
Sources	12
Advertising and Announcements	13/14

Through the Eye of a Needle

One pleasure of writing a journal or newsletter is that each issue takes on an individual character. Sometimes the *Margaretologist* is devoted to a single country or even a single theme. At other times, they are more varied, as they report on our world-wide activities without any obvious links.

The Center is becoming increasingly visible, both in the bead world and beyond. The success of Beads of the World published by Schiffer and the Bead Expo '94 conference have been quite stunning. That pleases us greatly, but those stories are in the open for all to see. Other events have been happening as well, on a more quiet but no less important level.

So, this issue is devoted to some of the work going on at the Center that may not be so widely known. It includes stories of our outreach activities -- the intern program and the Horace C. Beck Fund. It also presents initial findings in two important research projects currently underway: the beads of the shipwrecked Henrietta Marie and the Center's Bead Sample Card Project. An outgrowth of one of them is our investigations into the Gooseberry bead, which takes on a surprising horticultural twist.

Thus far, few members of our "family" have availed themselves of our advertising pages. These are in addition to the usual pages of the *Margaretologist*, and will not interfere nor subtract from the journal. Advertising on a sliding scale is open to all Members, Patrons and Supporters. Take advantage of them; you reach a dedicated and informed audience of bead lovers.

Last, but not least, we want to thank Beadesigners of the Boston area for their kind gift to us last year. It has taken a little longer than it should have to acknowledge it because there was a mistake of recording it here. As with all discretionary grants, we are most grateful because they allow us that extra bit of freedom to get things done.

And Keep In Mind . . .

1. If the last two digits on the top line of your mailing address is 7:1, you need to re-new now.
2. Member's fees are now \$30, Patrons \$80, Supporters \$200 for two year terms; Overseas \$35, \$90 and \$210, please, to cover air mail costs.
3. If you move -- tell us!
4. Gift subscriptions means you care about someone else's bead interests.
5. Encourage support from your Bead Society for all bead research groups.
6. Advertise free. Become an intern. (see pp. 13-14).



Calendar 1994 - 1996

*15 January - 15 February 1994: Internship of Jimi Kola

*4 - 11 March: Visit by Margret Carey of the British Museum

*21 - 29 March: Bead Expo '94, Santa Fe NM; pre and post conference events

*April - June: Research in Mexico, Central America

*June - July: Lectures and Workshops to Bead Societies in Austin, San Antonio and Amarillo, TX and Tucson and Phoenix AZ - contact local groups for info

*October: Washington, D.C., Baltimore November - Type Collection, the Philippine National Museum; other Asian research

*March 1996: Bead Expo '96 (Stone beads; venue to be announced)

*Late 1997: Excavation, Roman period Red Sea port, Egypt.

[starred dates are firm]

BOOK NOTES:

Beads of the World, published by Schiffer Publications, was officially launched at Bead Expo '94 in Santa Fe in March. It contains 142 pages with 272 color plates, covering the whole gamut of bead history and collecting. The first six chapters introduce beads and their uses as well as the major bead material groups. The last six chapters are divided geographically into Europe, the Middle East and India, East Asia, Southeast Asia, Africa and the Americas.

In addition to being a visual treat, the book is written with friendly, non-technical language and includes the first price guide to beads ever published. For those who wish more details, the back matter, with resources, notes, references and a comprehensive index will lead the reader to more information.

Beads of the World is available from the Center for \$19.95 + \$2.50 postage (\$22.95 total). Wholesale orders are also accepted by the Center.

Heirlooms of the Hills (Southeast Asia) and Where Beads Are Loved (Ghana, West Africa) with their four color plates, accessible text and detailed back matter are great favorites. They are \$15.00 each (\$1.50 postage for one, \$2.00 for both). Wholesale discounts available.

Book Catalogue No. 6 is in print. Send a long stamped addressed envelope if you would like one. An overseas edition is also available.

Think about our intern program -- details on the colored pages.

BEAD SAMPLE CARD PROJECT

Our second issue (1986) had a story about bead sample cards. Since then, much more has been learned about cards from around the world and some conclusions drawn about them. The Center now has apparently the world's largest collection of such cards, numbering 425 different ones and several hundred duplicates. We have embarked on a program to register, document, photograph and publish a detailed body of these cards. This is a preliminary report.

What Sample Cards Are

Bead sample cards are usually pieces of cardboard on which are affixed beads. They are mostly sewn on, though wire and glue are also used; some cards are known with both string and wire.

The origin of bead sample cards is unknown. As all use cardboard, and as no other material comes to mind that would work so well, they may not have been made before cardboard was widely available at the beginning of the 19th century [Greaves 1942:849; Davis 1967:61-3]. The oldest known ones were owned by a Dutch trader in Indonesia who died in 1830.

Their purpose is communication. Exact bead samples eliminate the necessity of attempting to describe them. Is there a reader who has not had the frustrating experience of trying to describe a bead to someone who does not know it? The problem of bead classification is closely linked to this difficulty. Sample cards obviate the need for tedious descriptions. The beads are right there, often in the range of available colors and sizes. They are indicated by a stock number, so "bead 6006" or "number 345, light green, large" is an immediately understood message.

Who is communicating to whom? The answer varies. The chain of bead distribution is often manufacturer to distributor to local dealer to customer. Some cards are made by beadmakers to give (or frequently sell) to distributors or dealers showing the line of beads available. Distributors make up cards, sometimes with beads from different manufacturers, for dealers. Dealers make up cards to display in the shop or show customers. One card type compares two beads, a sample desired by a customer sent to the maker or distributor matched with a bead from stock; these are often marked "your sample/our countersample."

There are alternatives to sample cards. Until fairly recently printed pictures lacked much of the information beads carried, especially color. But color printing has improved and become less expensive, while preparing sample cards is costly because of the labor involved. As a result, bead sample cards may be becoming a thing of the past. Many dealers now use catalogs, and some even print sample cards for their customers. The other choice is a collection of beads, marked in some fashion as to what each one is. Dealers and manufacturers who do not prepare sample cards sometimes do this. They are not as easily handled as sample cards, but fulfill the same func-

tion. Along with cards, the Center continues to be our repository of both of these options.

Sample Card Preservation

Many bead sample cards are in current use; the exact number of "working cards" is not known. They are part of the commerce in beads, used by manufacturers and dealers. In a few cases, they are offered for sale to the trade or the public. More often, however, they are sold only when they are no longer useful.

When the beads on "working cards" have been used, continued or gone out of style, the cards are no longer employed. They may be offered for sale. Often the beads are sold individually or card buyers remove the beads to use. While this does not harm to the beads, it erases any information on the cards and aborts their role as historical documents.

For the future of bead research, three vital steps are the goals of our Bead Sample Card Project. The first is that cards (also catalogs and reference collections) be preserved, because without that nothing more can be done. But, curating alone is not satisfactory. The second step is to document all cards. This requires considerable work identifying and locating them, examining, recording and photographing them. The final step is to publish them. The Center has begun this work, and negotiations are underway for the publication of as many significant cards as possible. The negotiations look most promising, and involve the publishing of cards in more than one volume.

Working with Bead Sample Cards

If I were to design the ideal bead sample card, it would include the name and address of the manufacturer, the date produced, the prices of the beads, the dealer using the cards and the date when production ceased. Oh, if it were only so! I have never seen anything like that, and it probably does not exist. What we do have are cards with color numbers and sometimes logos and often nothing else.

Hence, the researcher must glean what can be learned about cards from what is often very scant data. The more cards of one type available for study the more can be learned, because we can link cards with similar beads, layouts, printings and so on. If one has a date or an indication of origin we can usually (but not always) infer those facts for similar cards. A variety of information -- when zip codes or telephone exchanges were introduced, how a count name was spelled or when certain processes became available -- prove useful in dating cards.

Still we are far from working out the story of these cards. After all, the chase is at least half the fun.

Bead Sample Card Collections

To date, we have identified seven large collections (defined as having 50 or more cards) of bead sample cards and many smaller ones. The seven large collections are:

1.) The Glass and Costume Jewelry Museum of Jablonec nad Nisou, Czech Republic, which houses a variety from local makers and the fifty-odd set collection of the dealer, A. Sachse. 2.) The Glass Museum in Murano (Venice), Italy. Their exact number of cards is not known, but is no doubt large, as the museum was established in 1869. 3.) The J.F. Sick & Co. cards in the Royal Tropical Institute of Amsterdam, the Netherlands. This is a holding of a major dealer, totalling 201 cards. 4.) The J.F. Sick & Co. cards in the Department of Archaeology, University of Ghana, Legon, Ghana. This is a working collection once used by dealers in Ghana, now totaling 173 cards. 5.) The Dan Frost collection of the Stephen A. Frost & Son Co. of New York at the Illinois State Museum, Springfield, totaling 71 cards. 6.) The Center for Bead Research Collection, obtained from various sources, particularly the New York dealer, Elliot, Greene & Co., totaling 425 cards different cards.

Major collections may also exist in the Museum Neugablonz in Germany, and possibly the Warmensteinach Museum, also in Germany, an earlier bead-making center. The Bead Museum at Prescott, Arizona, and the British Museum have collections of several different cards. One or more cards are also known in a large number of museums and in private hands. One of our first duties will be to coordinate a list of them.

The Center's Collection

The Center's collection is still growing, as more cards are being prepared for shipment to us. At the time of writing we have identified and cataloged the 425 cards in our holdings. The 79 page catalogue contains entries on each card, which include:

- Accession Number:** Year and entry number
Series No.: Printed number of card, usually on top.
Material: Material of the bead and, for glass, how it was made.
Layout: Physical arrangement of the beads and any unusual card configurations.
Origin: By maker and country, when known.
Date: As well as can be determined.
Use: How the card functioned in the trade.
Documentation: Notation of how origin and dates were determined.
Source: How and from where the cards were obtained by the Center.

The preliminary census of the cards show the following (totals do not add up to 425):

COUNTRY OF ORIGIN

- Germany - 122
 Japan - 90
 Czechoslovakia - 27
 France - 5
 U.S.A. - 3
 Hong Kong - 2
 Korea - 1
 Italy (Venice) - 1

DATES OF CARDS

- Pre 1914 - 2 Pre 1918 - 3
 Late 1920s-30s - 25
 Post 1930 - 1
 1930s-50s - 10
 Post WW II - 104
 1950s - 16
 Post 1955 - 31
 1950s-ca 1965 - 1
 Post mid 1960s - 1
 1970s - 61 1980s - 2

MATERIALS OF BEADS

- Glass 172 total, of which:
 Molded - 95
 Lamp-wound - 54
 "Seed beads" - 15
 Other drawn - 3
 Blown - 3 Prosser - 2
- Plastic 185, of which:
 Acrylic - 9 Styrene - 1
 Lucite - 1 Other - 174

Others Materials

- Metal - 14
 Wood - 8
 Ceramic - 3
 Silk wound - 2 Cotton - 2
 Horn - 1 Shell - 1
 Enameled metal
 with rhinestones - 1

Mixed media on one card:

- Glass + Plastic - 10
 Metal + Plastic - 1
 Glass + Metal - 1
 Plastic + Wood - 1

The cards show concentrations in each segment, with Germany and Japan leading as producing countries, Post World War II (mostly German) and the 1970s (mostly Japanese) leading in the date field and glass and plastic dominating the materials. Czech cards account for the bulk of those dated from the 1930s and earlier. Some are not strictly bead cards, having "stones," sew-ons or buttons, closely allied with bead production.

Much work remains to be done, and in fact, we have not received all the cards for which we have contracted at this point. Any help from our readers, in locating other cards, donating cards, making cards available for study or helping the work financially, will, as always, be gratefully received.

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GOOSEBERRY BEADS

Our next issue will report on beads from a wrecked English slave ship, the Henrietta Marie, which sunk off the Florida Keys in 1700-01. Here we expand on the most interesting beads from that site.

The Glass

"Gooseberry beads" are drawn with white stripes sandwiched between clear glass. This excludes beads with clear cores and white surface lines, though they are sometimes mistaken for "true gooseberries." The well known beads have not been studied in detail.

The first known use of the name was in 1704 when John Barbot (1746:404), engaged in the slave trade in Nigeria, said the beads most in demand were, "rangoes [carnelians], beads gooseberry-color, large and small." Intriguingly, the development of the fruit and the bead paralleled each other.

The beads are found on mid to late 16th century sites in North America and Africa. The last recorded one is on a sample card of 1909 [Francis 1988:24].

The berry, *Ribes spp.* (currants), is found in Eurasia and North Africa, but was only domesticated in the 16th century (it was not cultivated by the Greeks or Romans, and is first recorded in the 13th century), its popularity exploded; in the late 18th-early 19th centuries there were "Gooseberry clubs" in England, with gentlemen developing new varieties; 722 cultivars were named by 1831. The fad disappeared after the infestation by the American gooseberry mildew in 1905. American gooseberries have only achieved local popularity, chiefly in Oregon [Smith 1979:309-10].

The striking coincidences in the history of the bead and the berry might suggest that the popularity of one was linked to that of the other. However, I cannot make any definite statement about this relationship.

And the name? Possibly from cooking them with geese, but from the 16th century English *grosiers* or *groser*, derived from the French *groseille à maquereau*, meaning "mackerel current" from its use in cooking with fish [Smith 1979:309].

The secret to gooseberry beads is the contrast of clear glass with opaque white stripes. Clear glass was long a goal of European glassmakers; its history is reflected in these beads. Nearly clear *cristallo* was developed by Angelo Barovier (1405-60), made with purified alkalis, special care and manganese as a decolorizer (see box) [Mentasti 1980:XLVI].

In *L'arte vetraria* (originally 1612), Antonio Neri devoted much space to clear glass. The finest *cristallo* (called *bollito*) was not made from sand but marble

pebbles from northern Italian rivers. Syrian soda ash was purified repeatedly; manganese came from nearby Piemonte. The initial frit was crushed and reheated several times before the glass was sufficiently

cleansed [Mentasti 1980: LV-LVI, 1-2]. Less clear glasses were made with decreasing care, fewer washings and, for common glass, sand in place of marble.

Lead glass was used for gooseberries. Harter [1981:11-2; 1992:10] compared some from Cameroon to newer examples from Mali and Burkina Faso. He said the older ones were more clear and brilliant, due to lead, which gave the beads a high specific gravity.

The beads of the *Henrietta Marie* sent to the Center are rather (but not perfectly) clear, with a slight grayish-green cast. They have specific gravities of about 3.33, indicating a high lead content.

It is not known when lead was added to *cristallo*. Neri discussed lead glass [Ibid.:38-79] but not in *cristallo*. However, at least by 1847 lead was a *cristallo* ingredient, particularly for beads [Moretti 1982:73-4].

The gooseberries from the *Henrietta Marie* were likely decolorized with manganese. This is not evident under a black light, as its fluorescence depends on the glass [Weyl 1959:469-74]; lead may dampen it].

Manganese will solarize, turning glass pink or violet. Good [1972:126] reported on pink gooseberry beads, assigning them different type numbers (#157, 158). Harter [1981:11; 1992:10] noted this effect in some beads, as have I; this indicates manganese (see box).

There is a remarkable, unexplained connection between the bead and the berry.

MANGANESE IN GLASS

Although pure metallic manganese was not isolated until 1770, its most common ore, pyrolusite, had been used since antiquity [Trifonov and Trifonov 1982:62-3]. Pyrolusite is from the Greek for "fire" and "to wash" (cf. Lucite) because of its known ability to clarify greenish or yellowish glass [Sinkankas 1969:332].

This made manganese the "glassmakers' soap" for ages, but it needs to be treated correctly. The trivalent (Mn⁺⁺⁺) state imparts a pink color, which cancels out the usual bottle green caused by iron. The divalent (Mn⁺⁺) form imparts no color. To achieve clear glass (or, with larger amounts, violet or black) the glass must be formed in an oxidizing condition, either by adding chemicals or running air into the furnace. A reducing (muffled) furnace, produces no effect because the manganese is in the divalent state.

Manganese will fluoresce differently depending upon the glass it is in. The key here is whether the manganese molecule has become part of the glass structure or is simply caught within this structure.

Since glass clarified with manganese contains both the divalent and trivalent forms, it can undergo a color change if subjected to ultraviolet radiation. Radiation (most commonly from the sun) knocks an electron from the divalent manganese, transforming it into the trivalent, which turns colorless glass pink or violet. This is known as solarization. [see Weyl 1959:469-74; Angus-Butterworth 1948:67-8]

The surfaces of gooseberries from the *Henrietta Marie* are pocked with many small pits, even in the holes. "Frosted" surfaces were reported by Harris et al. [1965:312] from the Womack site (1700-29) and by Good [1972:126] at the Guebert site (1719-1833). This is most likely caused by corrosion, even though the Caribbean floor and Texas and Illinois soils are quite different environments.

Stripes and Shapes

Karklins [1974:72] reported the stripes in gooseberry beads in Holland were not glass but "fine linear bubbles... near the surface." Unfortunately, this has been blindly repeated in the literature. He now believes

Gooseberries, not chevrons were the key fancy bead in the slave trade.

the beads he saw were corroded. The same effect, involving from one to all the stripes, is on some beads from the *Henrietta Marie*. Both collections were submerged for several centuries.

The number of stripes varies. Karklins [1974:72] reported 13 to 18. The lowest reported is eight, usually twisted [Harris et al. 1965:312; Good 1972:126]. Twelve, 14 and 15 are most common. Those seen from the *Henrietta Marie* have 10 or 11, numbers not recorded previously.

There are several shapes including tubular, round and ellipsoid. Smith [1983:150] suggested ellipsoidal ones were early, with round ones popular from about 1650. However, round ones are known in late 16th century America [Pratt 1961:8; Wray 1983:42; Kent 1983:80]. Several shapes may be found at the same time, which is not surprising for drawn beads.

Gooseberries, Trade and the Slave Trade

The distribution of gooseberries is wide, as we might expect with long-lived European trade beads. In northeastern USA, they are on Native sites in the 16th century but thereafter concentrated in the south and Mississippi River system, brought by the French or the English [Brain 1979:106, 124]. The Spanish used them; some were on a Galleon wreck off the Dominican Republic from 1641 [Deagan 1987:172]. They were important trade goods to Native Americas at sites with European connections.

In Africa, a barrel shaped one with 12 stripes was uncovered at Ayawaso, Ghana, with a radiocarbon date of 1480 ± 50 and a terminal date of ca. 1680. Pieces of round ones were uncovered from the Brong Quarter of Begho, with radiocarbon dates ranging from 1450 ± 100 to 1710 ± 100 . [pers. observ.; for Ayawaso, pers. comm. Bredwa-Mensah Yaw 1990; for Begho dates Anquandah 1982:143-4].

Gooseberries were especially active in the slave trade. Barbot said they were a key bead in this commerce. Harter [1981:11-2; 1992:10] called them, "the most precious beads in the [Cameroon] Grassfields," saying that 20 bought a male slave in the 19th century.

In addition, they are on the *Henrietta Marie* and

a mid-18th century Dutch wreck off Bermuda [Karklins 1984:34; for a picture see Peterson 1977:724-7]. This wreck, dubbed the "Manilla" from the large number of bronze bracelets, was either an escort or a supply ship for the Dutch slave trade. They have also been uncovered from a slave cemetery on Newton Plantation, Barbados (ca. 1660-1775) [Handler and Lange 1978]. It seems the gooseberry beads (not, note, the chevron) was the key fancy bead in the shameful trade in human flesh.

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MORE ON SOUTH INDIA STONE BEADMAKING

Our last issue reported on the South Indian stone bead industry. Its importance to the global bead story, specializing in beryl, rock crystal and amethyst, had not been recognized. It was a major industry 2000 or so years ago, but what was its history in medieval and later times? While there is still much to learn, combing our library has turned up some very interesting data.

The Muslim traveler Ibn Khurdadbeh, writing around A.D. 844-48, observed along the West Indian coast. "Crystal is obtained from Mulay and Sandan." [Nainar 1942:198] Nainar assumed Mulay was Quilon in modern Kerala and Sandan an unidentified island. The 6th century traveler Cosmos mentioned Malé as the port for the pepper trade and this may be Quilon. Otherwise, Mulay and Malé are simply Malai ("mountain"), the local name for the west coast, which the Arabs came to call Malabar, a name still used [Yule and Burnell 1886:791, 541].

The Russian traveler Athanasius Nikitin in the 15th century wrote, "From Kolberga I went to Kooroola, whence the *akbik* [agate] is produced and worked, and from whence it is exported to all parts of the world. Three hundred dealers in diamonds reside in this place.... I stopped there five months and then proceeded to Calica." [Major 1857:30]

I have puzzled over this passage for years. Where is Kooroola? Major [1957:30 n. 1] quotes a certain Stroef that Kooroola is Kulura ("L's and 'R's are easily transferred in speaking). This is not helpful. The other two places are known: Gulbarga (in the recent earthquake) had been the seat of the Bahmani Kingdom and Calicut is a west coast port. There are two places between these cities with might be Kooroola. One is Kolar, but Nikitin did not mention the gold working there. However, if he took the path of least resistance around the mountains, crossing to the coast through the Palghat pass, Kooroola might well be Karur, the largest city near the quartz and other stone deposits. It is at Karur that the current Tamil Nadu government intends to revitalize this industry.

The Dutch traveler Huyghen van Linschotan (1598) left a strange note: "There is likewise founde in India a kinde of thing much like to Rock-crystal, but in-

deede it is none: for there is no Christall to be found in India, nor in any of the oriental countries. It is called berylo, and is little different from Christall. It is much found in Cambaia, Pegu, and Seylon, and they make many things thereof, as beades, seales; and divers other things, which they sell unto the Christians and use among themselves." [Tiele 1885:138]

How far can we trust this man? It is outrageous to say there is no rock crystal in India and that it is beryl. There is beryl, but it was not made into seals, rings and a "thousand such curiosities." The places he listed are Cambay (where it was cut; there are no major deposits nearby), Pegu (Burma) and Ceylon.

He further wrote, "Chrysolites and Amatistes are many in the Island of Seylon, Cambaia, and Ballagatte, [and] the stone called Alakecca, [which] is also called Bloodstone, because it quickly stancheth blood, and other stones called Milk stones, which are good for women that give milke or sucke. These and such like stones are in great numbers found in Cambaia, and Ballagatte, and are brought to Goa, to bee solde, whereof they make Beades, Seales, Ringes, and a thousand such like curiosities." [Tiele 1885:141]

I shall not attempt to identify "chrysolite." Now usually applied to a form of peridot, the name has been used for chrysoberyl, topaz, corundum and a host of other minerals [cf. Bauer 1968:619]. Ceylonese chrysolite is a tourmaline. "Amatistes" is amethyst. The "bloodstone" is carnelian [Francis 1993]. The "milk stone" is white chalcedony.

Whence came these stones? We know about Ceylon and Cambay; Balaghat (Ballagatte) means "above the passes." It is a widely used name, including a district in Madhya Pradesh. However, for the early Europeans it meant the highlands behind the western mountains (to van Linschotan the land behind Goa), a region that includes the area of southern India that concerns us. Lastly, beads were not made in Goa, but in Cambay and Balaghat and exported from Goa.

As to the end of the industry, the beryl mines at least, were played out in the early part of the 19th century. An Englishman, J.M. Heath, apparently held the last mining lease in 1818 [Jhingran 1951:168]. As late as 1951 Jhingran [1951:167] also said quartz was cut in Tanjor.

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FIRST HORACE C. BECK GRANT AWARDED

The Horace C. Beck Fund is a joint project of the Chicago Midwest Bead Society under Naomi Rubin and the Center for Bead Research. Its purpose is to provide funds for students in developing countries working on bead related projects. The financial side of the fund is handled by Naomi Rubin, while the administrative side is the responsibility of the Center.

The Fund is pleased to announce our first recipient. He is Alok Kumar Kanungo, a pre-doctoral student at Deccan College, Pune, India. Kanungo is from the eastern state of Orissa, which contains a large population of tribal peoples, not yet fully integrated into established Indian culture. One of these groups, the Juangs, is the focus of Kanungo's research. To quote from his application:

"Orissa is an important region for the study of beads as it contains a large number of tribal populations. Of various tribes inhabiting the state [of] Orissa, the JUANGS of Keonjhar [district] are anthropologically most interesting. These groups represent one of the most primitive and backward tribes of Orissa. This tribal community is mainly confined to the hilly and forested tracts of Keonjhar district. As the topography of this region makes it unsuitable for large-scale irrigation-based agriculture and for ... smooth

The Juangs have maintained their traditions, including a vast knowledge of local flora

transport and communication, [it] did not attract advanced agriculturist groups from the plains. This tribal community was able to maintain its traditional modes of subsistence and its linguistic and cultural identity. One of the most outstanding features that distinguishes the Juangs from other neighboring groups is their inexhaustible knowledge of their biological environment. It is primarily this factor which inspired me to take up this tribe for a detailed and systematic study on their beads.

"[The] intensive survey of many Juang tribal ornaments with special reference to beads will be an important aspect of the methodology. Special emphasis will be given to understanding the beliefs behind the use of beads and the provenance of these beads. To ascertain the whole pattern of bead making to their use, fieldwork will be carried out with much stress on ethnographic inquiry following a keen observation of the use of beads. This study will include:

"A. Material they use as beads or for bead manufacture.

"B. Source of raw material for bead making.

"C. Method of manufacture; their use of knowledge, skill, traditional technologies and artistic manifesta-

tion (art & craft) on beads.

"D. Types of beads used by them.

"E. Difference in [the] use of beads between male and female.

"F. Etched beads (if any) why and in which style with mode of operation in manufacturing them.

"G. Mode of the wearing of beads like in the neck, in the plait, in the hand, in the wrist, etc."

At press time, Kanungo has returned from his field work and is pleased about it. The next step is for him to organize his material and publish it; I

shall help out in any way I can. You will be informed as more is learned from his project.

An interested, trained native can do a tremendous job on bead research. This task would be very difficult if not impossible for an outsider. For example, I can get along in Hindi, but the Juang not only don't speak Hindi, but only a few speak the state language, Oriya. This task needs the ability to get inside the culture. Only a native person can do that.

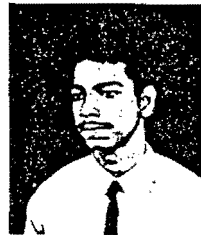
The other side of the coin is the tremendous handicap students in developing countries work under. The Beck Fund was born from a conversation between Naomi Rubin and myself as I recounted how a student in Ghana, who had done a paper on shell use in a coastal village, told me how difficult things were. It cost him 30,000 cedis (about \$100 then) for travel, photography, photocopying and typing (not a common skill even of educated people in the developing world -- what point without a typewriter?). He had received a grant from the University, but only 3000 cedis. I knew that the situation was not unique and had thought about setting up a fund, but where was the money going to come from? What a delight that Naomi volunteered to do the fund raising!

The Beck Fund yields double dividends: it produces bead research and bead researchers. The world of beads is so enormous that many must get involved before we have the bulk of the story. The Beck Fund promotes publication and the spread of bead knowledge. By being given to students, it is a tremendous encouragement, showing that someone cares, inspiring them to take beads seriously and helping the bead researchers of tomorrow.

The Horace C. Beck Fund was named in honor of the first scientific bead researcher. Beck had some experience of developing countries, even when travel was more difficult. He spent time in India as a young man, and after he married his favorite vacation spot was in Tunisia. I am sure he would have approved.

If you know a candidate or institution where students might take advantage of this opportunity, please contact the Center.

To donate to the Beck Grant Fund, please contact Naomi Rubin, Horace C. Beck Fund, 1020 Davis Street, Evanston, IL 60201.



JIMI KOLA: THE CENTER'S FIRST INTERN

In the last issue we announced that internships were available to those interested in learning about beads and helping the Center with its work. I was most pleased to have had our first intern during January and February.

He is Jimi Kola of Ohio, who was here for a month, while helping with many projects, freeing me to research. I quite enjoyed having him. The only serious disagreement we had was over the weather. He loves snow and winter; I think of it as gloom.

Kola became interested in beads as a child, repairing his mother's jewelry. When ten years old, he found fossil crinoids in Virginia and strung them to

Quality and Healing Properties are the Hallmarks of Kola's Jewelry

wear. His interest sparked, he began buying and stringing beads, and selling his creations while still in junior high school. He considers himself a fabricator, working with wire, old trade beads and those of natural materials. His distinctive, sturdy jewelry has inspired a dozen or more people, many of whom market their work under the name "Kola jewelry."

I asked him what he looked for in beads. He said certain colors appealed to him, especially red, black, white, yellow and turquoise (except for the turquoise, the pallet of the Gad-dang of the northern Philippines). He avoids plastic beads; while he maintains there are valid uses for plastic, he thinks we have gone overboard in our employment of it. He also refrains from using animal parts from endangered species or an animal not humanely raised or slaughtered. He is attracted to beads for their individuality: "misfits" and the odd bead.

As an artist, he looks for beads with large holes because he is concerned with stringing that lasts, and that requires strong thread or wire. If worn daily, a silk or cotton strand needs restringing every few years. He prefers such pieces and restrings some regularly. This is impractical in many cases, however, so the only synthetic (aside from glass) he uses is artificial sinew (nylon), which is quite durable. He wants a piece to last 50-100 years, and modifies the beads as necessary. For example, metal beads cut string, so he puts cores in some beads, files ends down and uses knotting techniques to prevent this. As for pesky agate beads not drilled straight, he chips the internal ledge with a punch; turquoise can be hand drilled.

Jimi Kola views his work as healing; his pieces as medicine. They embody the energies in colors, gravitation, electricity and atomic structures. Most people aren't conscious of what is good for them; but seek it out unconsciously. He is not concerned with fashion; he wants people to wear, look at, appreciate and

learn from his pieces. For example, ancient elements tie the current owner into the life of the past owner. Thus, also, the prohibition against elements with bad karma. At first, his ethics made it hard for him to sell jewelry and he only traded it. In time, he began selling, but especially to people he knows.

When Kola begins making a piece he has no idea what will emerge, for the design does not come from him but from the energy that flows through him. Once begun, the creation flows, virtually mechanically. Selling a piece in which so much physic energy is invested is the hard part

Kola became an intern with the twin intentions of "learning about beads and helping out in any way I can," and was impressed by all the "beautiful and informative things available." He has certainly been a big help, having worked on several varied and necessary projects. He has also been inspirational when talking about his favorite topics. It has been a joy having him around and he has proven most worthy to inaugurate the intern program.

PAUSE FOR A POEM

Corrine Gurry composed this thoughtful poem while I was in Seattle last year. She claims inspiration from the Bead Identification Workshops.

A Bead Fell

*A bead fell from her hand
into the dust beneath her feet
and formed an archaeologist's delight
two thousand years in the future.*

*She carried water in clay vessels,
made the mud, baked the beads,
pounded the root, brewed the dye,
cooked the beads and strung them.*

*A bead fell from her hand
into the dust beneath her feet
and slept beneath many generations,
many villages, many lives.*

*She worked a field, cooked, cared for her
home, had six babies, three survived.
And she wore beads, her mother's,
her grandmothers' and her own.*

*A bead fell from her hand,
a precious bead to me who has it now,
a treasured touchstone of the ancient past,
a real thing in this time of unreality.*

*A bead fell from her hand
and into history.*

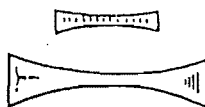
Corrine Gurry, Bellevue, WA 1993

**NEW
BEADMAKERS**
[Or rather, a new slant on old beadmakers]

The Old Story

Perforating beads by pecking repeatedly with a hard point rather than drilling with rotary motion is a method known from different parts of the world. I have documented this process in India before 2000 B.C. and in pre-contact Mexico (Francis 1988:57-8). In prehistoric western Africa, pecking was applied to disc quartz beads both for shaping and perforating (Francis 1994:108). These are found in varying archaeological contexts, and some may have been made fairly late.

The only known recent example of boring stone beads like this was by Yoruba beadmakers (men with



Ilorin
Beadworking Tools
Chisel

Hammer
Actual size
Daniel 1937

some help from the women) in Ilorin, Nigeria, after coming from Old Oyo. The chief material was red jasper, imported a considerable distance, which was made into several shapes, notably long cylinders. The beads were given a high polish and were greatly prized until the end of the last century. They are known as Lantana.

The process was described by O'Hear (1986:36) in her excellent article on Lantana beads:

First the stone was chipped roughly into shape with the aid of a small chisel and a double-headed hammer of burnished steel. It was then pierced with a small punch or unthreaded drill... which was simultaneously twirled on the stone and tapped with a hammer. A 1.5-millimeter point would be used at the beginning, and replaced by finer ones as the work progressed. A worker might have as many as sixty punches set out in front of him. The pierced bead was worked vigorously across a grinding stone before final polishing on a smooth board

As might be expected, this was laborious. It took some three hours to bore an inch (2.5 cm) and up to a week to produce an 18 bead necklace (ibid.:38). While production was quite high in the late 19th century, it dropped off precipitously in the early 20th. In 1922 there were 851 beadmakers counted, in 1934 only 28, in 1935 only 15, in 1939-40 they were down to 13 and none were recorded in 1955-56. Not all had died out, of course, and for some time there were a few who made beads part-time, but the industry has not revived and attempts at introducing rotary drills have failed (ibid.:38-9).

The New Story

In the 1970s and 80s large, matte glass beads came into the American market from West Africa, the largest often called "ice cubes." The late Patti Yeiter used to proudly display one on a strand which still carried the "Coca-Cola" legend. It was widely said the beads were ground and drilled from the bottoms of bottles (Francis 1994:111). One in the Center's collection has a "Made in Togo" tag, but it is known that this was a transfer point; they were said to have been made in Nigeria. These beads are not much on the market now. I have not seen any for sale in the last few years and the Picards label them "no longer available" in their more recent price lists.



Ilorin
Punch

Recently a Member sent some for identification. At first I was just going to say what was known about them, but the discipline of issuing an Identification Certificate was rewarding. The beads are ground, but only superficially. They are principally pecked into shape and finish. More importantly, they were not drilled but perforated by pecking. Silicone impressions of the bores show exactly the same scaly feature as in the bores of Lantana beads. The only difference is that the glass was more chipped, no doubt because it was glass and not jasper.

This I believe is a very strong technical clue. We are now in a position to form an hypothesis about these glass beads. They appear to have been made in Ilorin by Yoruba Lantana beadmakers. Production has no doubt ceased, as it has with Lantana beads.

When I get to Ilorin (as soon as I can work it out) I hope to be able to confirm this hypothesis and answer some of the many questions remaining. They include: 1.) When were these glass beads made? 2.) For what purpose were they made; what markets were they intended to serve? 3.) What was the relationship between them and Lantana beads? What differences were there between working the stone and the glass? 5.) When did production stop?

Stay tuned.

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BEAD ALERT

No new faked beads (just as well), but three members have responded to our call for being a bead detective. We're working on it.

SHORT NOTES

More on East Java Mosaics

In several letters, Sumarah Adhyatman, author of *Beads in Indonesia*, reviewed in the last issue, has written that she and co-author Redjeki Arifin have been doing yeoman (yeowoman?) work on the mosaic beads from East Java.

She is convinced and has convinced me that they were not made in the Kediri kingdom, but are a century or so earlier. Their center of production appears to be in the far east of Java, possibly around Jember. This area was part of Kediri, but only later. This seems to be the case because of the ceramics and other material found with the beads, both in the days of the Dutch and more recently in unauthorized excavations. Except for that, the conclusions in the last issue remain.

They have called these beads *Jatim*. Indonesians love to play with their language, and this word is an indication of that, for *Jatim* is formed from the words *Jawa Timur*, which is "East Java." I am going to refer to these beads in future as East Java Mosaics instead of simply Java Mosaics because it is more accurate, and we are using the same name.

Many thanks go to Sumarah and Djeki. Keep up the good work.

Middle Eastern Glass Beads

I call them keystone projects. They are exercises that don't necessarily yield anything that can be published right away, but they must be done in order to do other projects. They require a lot of work, time and energy. And because they don't immediately pay off and are so complex, my avoidance reaction mechanism goes into effect when I have to do one.

Happily, another one is now complete. It is the working out of a chronology for glass beads produced in the Middle East. The period of time considered is long, about 1000 B.C. to AD 1500. Not every bead is included, only those of particular techniques or decoration which makes them highly distinctive.

The problem is that in many cases these beads have been labeled "Roman" in the literature. But the Roman Empire only had control of this industry for a few centuries. Before the Romans, glass beads were made in this region and after them beads were made in Byzantine and Coptic territories, later to become Islamic regions. The products are widely spread.

Some beads, indeed, seem to have had a very long life. Small red (and a few other colors) round segmented beads and cobalt blue folded bicones can be documented from about 300 BC to AD 1200 -- a 1500 year span.

But are there differences among other beads that can help us tell them apart? This is essential for several current and future projects of the Center, including the Asian Maritime Bead Trade (née the Indian

Ocean Bead Trade), the Arikamedu excavation and the Berenicé excavation. (I know you haven't heard of the latter, but Berenicé is a Roman-age Red Sea port in Egypt. Excavations have begun; I am invited for the 1997-98 season.) So this keystone project had to be done.

And how does one do this project? First is the literature. It must meet two criteria: scientifically verified archaeological dates and clear descriptions or illustrations of the beads. To find both is not easy. Secondly is the personal examination of beads from relevant sites. Once the data is gathered it must be collated, which is the phase being worked on at the moment.

Quite distinctive patterns are now emerging among many of these beads. As it becomes clearer what can be said about them you will, of course, be the first to know.

Treaty Oak, R.I.P.

The Treaty Oak of Austin, Texas, which many people tried to cure or at least console with beads and other small presents [see issue 2(4), page 8], did not make it. The efforts of a warped individual to poison the historic 600 year old tree proved too much for it in the end. You may already know this; I must have been out of the country when the news came. I read about it in Molly Ivins' latest book.

Things to think about helping us out --

* Upgrade your membership from Member to Patron or Supporter or Patron to Supporter. A large percentage of our members are in the upper two classes. They do this because they appreciate what we are doing.

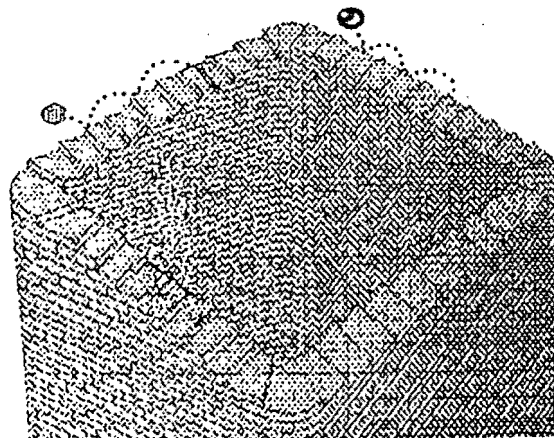
* Urge your Bead Society or store to become Patrons or Supporters of the Center (and to help out the other bead research organizations as well).

* Think about a bequest to the Center.

* Volunteer to help as an intern.

* Tell other bead lovers about us.

In advance, *Thanks*



Why M.C. Escher could never build up his bead collection.

SOURCES

Book reviews and other useful resources for those who love beads.

Several books sent recently to the Center are devoted to practical aspects of beadworking. Regular readers will discern that this is not exactly my specialty. I have made beads and jewelry, but claim no particular expertise. Thus, it was fortunate that a recent visitor to the Center has such experience and was willing to discuss these books with me. Much thanks is due this sharing.

All these books are softbound. Several of these publishers may be well advised to apply for an ISBN for future editions.

The Basics of Bead Stringing by Mel Anderson [1993; 11th revised printing] Borjay, Santa Monica CA. 56 pp. + 4 color, many ill. ISBN 0-9615353-0-X. \$4.95.

A commendable book for both basic stringing and fancier projects. It makes a perfect introduction, and takes the reader beyond simple work. It is concise, yet thorough and heavily illustrated to show exactly the tool or technique discussed. It not only covers the basics, but leaves alternative or more sophisticated work as options. The book is professionally done, with outstanding drawings and a bonus of four color plates of finished projects. An excellent buy. No wonder it has sold over 200,000 copies.

Complete Guide to Basic Wire Work for Bead Jewelry by Kate Drew-Wilkinson with Colin Haynes. [1993] Nomad Press, Ashland OR. 90 pp., many ill. No ISBN. \$9.95.

The English author offered a workshop at the Santa Fe '92 conference which was very popular. Her book is devoted to using wire with beads. As such, it does a superior job. It gets the reader started with a minimum tool kit, is easily followed and full of informative detail. It also anticipates problems one might have working on certain projects and leads the reader through them. The emphasis on quality is appreciated, as for example the chapter on stringing beads, explaining the problems with popular tiger tail and solutions for it.

Some may find the 90 degree orientation of the book annoying; it is unclear why it was laid out this way. A few bead names (melon on p. 14) and ascriptions (if the beads on p. 50 are from the Indus Valley Civilization they are more than 3000 years old, but identification from sketchy -- albeit adequate -- drawings is dubious). But, these are minor faults, to be corrected in future editions, for the book has a future ahead of it.

Beads Etc.: Incredible New Bead Charts Volume One: Expand Your Beading Skills Beyond Your Wildest Dreams! by Sue St. Martin [1993] Black Bear Publishing, Iron River, WI, 32 pp. (including both covers). No ISBN. \$5.95.

This volume is for beadworking of basic off-loom netted patterns. The suggestion that this is a revolutionary technique is as inflated as the title. While the illustrations may be useful to some beginners, they are not well presented and the charts are poorly drawn and difficult to read. Book production value is low. Some, even Christians, may be put off with the heavy religious messages on pages 5 and 32 (which is actually the back cover). Nor do we need to learn twice in this small edition that a lion was beaded for Larry Bastian, who has written hits for Garth Brooks and others, even if we are C&W fans.

Bead Frenzy: Tips & Techniques for Working with Beads by Teresa Nelson and Kathy Christenson [1993] Hot Off the Press, Canby OR. 16 pp. all color. ISBN 1-56231-154-9. \$6.95.

Once past the frenetic front cover, the pages are rather attractive. Each one has an assortment of finished projects and small inset photos showing how to complete various steps, though the captions are often minimal. The book is suitable for children and other novices making jewelry for themselves or as gifts. I object to the beads on Page 1. The scale and background makes many of them disappear. Does "crystal" refer to lead crystal glass? "Sand beads" (no doubt derived from "sand-cast" -- both inappropriate terms) are powder-glass beads. The publisher has a many similar booklets, some on jewelry and Fimo making. Fine for craft stores that carry it, but not for advanced work.

Designs for Beadwork, Applique & Embroidery, Vols. 1 and 2 by Kay Doherty [1991] 27, 19 pp. Pencil Bend Design Co., Kettle Falls, WA. No ISBN. \$7.95 each.

Especially as a set, these two booklets can be quite handy for those with some experience in beadwork. Vol. 1 has attractive designs and includes a valuable tip for ending loomwork that is rarely (if ever) seen in print. Patterns, ranging from simple to complex, are nicely laid out on a grid so they can be easily followed. Vol. 2 contains more complex patterns, a few of which are worth the price alone. These have been popular; Vol. 1 has been revised and is into several printings.

The next issue will announce the
Margret Carey
"Gotcha" Awards
 It's not a joke.
 It's meant to improve our service.

CENTER ANNOUNCEMENTS

BEAD IDENTIFICATION CERTIFICATES

When the Center was first established, we received a number of beads from people who wanted to know what they were. Many of them, frankly, were of recent date and not as rare as their owners somehow believed or hoped. We took a lot of time answering their questions and it cost us as well -- in postage just to reply. If the beads were nothing special, we rarely even got a thank-you.

In time, this became a nuisance. A small fee charged per bead stopped those who were not really interested and just thought that their recent Indian wound glass beads were something rare because they had not seen them before.

However, a need continued for the scientific identification of beads, and so several years ago we instituted Bead Identification Certificates. These certificates describe the bead in detail for further recognition, list the tests we apply to them and the results of those tests, and state our conclusions concerning them. We have charged \$10 per different bead. A number of serious bead enthusiasts have taken advantage of these certificates, several of them discovering that what they had was not what they had been led to believe. We have often published the results of the more interesting tests in the Margaretologist (there's one in this issue).

Now I am finding that the time it takes to issue these certificates is more and more scarce. We shall continue to issue them, but will now charge \$15 per bead. However, a special offer is to be made to our friends. In any given two year period:

Each **Member** is entitled to **one** Bead Identification Certificate for **free**.

Each **Patron** is entitled to **two** Bead Identification Certificates for **free**.

Each **Supporter** is entitled to **four** Bead Identification Certificates for **free**.

One more way to serve you.

CENTER INTERN PROGRAM

A Unique Opportunity to Advance Your Own Bead Studies and Help Out the Center

We have begun a program designed for people with a dedicated interest in beads. If you are interested in becoming an intern, please let us know as soon as possible so that we can arrange the details, even if your participation may be some time in the future.

You receive as an intern:

1. Room and board plus a small stipend if requested.
2. An opportunity to work at the Center, using all our facilities for projects of interest to you.
3. A wonderful time in beautiful Lake Placid, the jewel of the Adirondacks, with natural and cultural resources to suit every taste.

We require:

1. A commitment on your part for a definite period of time of at least a month.
2. Agreement to work on one or more projects at the Center.

Your requirements:

1. There are no restrictions in terms of who may be selected.
2. The more skills you can bring to the project, the better. We can especially use people who are good in graphics and photography. We also need such basic chores as filing, cataloging, binding and labeling done. We will train you in the program.

What to do:

1. Write us a letter. Let us know what your interests in beads are and if you have a particular project of your own in mind.
2. Enclose the names (address, phone number) of three personal references and a photograph (the picture is not mandatory, but we would appreciate it).

We will follow up from there.

**Center for Bead Research Intern Program, Four Essex Street, Lake Placid, N.Y. 12946
for more information write or call (518) 523-1794 or fax (same number)**

**KNOWLEDGEABLE DEALERS
AND INSTITUTIONS**

THIS IS YOUR SPACE -- LEARN TO USE IT

No, I am not setting up any advertising this time. That is up to you. But each time you don't put in an ad, you miss an opportunity to reach some of the world's most dedicated bead lovers.

For subscribers of the Center for Bead Research, advertising is largely **FREE**. What could be better?

Per two-year terms

Individual Members are entitled to **one free classified ad.**

Individual Patrons are entitled to **two free classified ads.**

Individual Supporters are entitled to **four free classified ads.**
(15 words, address is free)

Dealer/Institutional Patrons are entitled to **two free display ads.**

Dealer/Institutional Supporters are allowed **four free display ads.**
(business card size)

Charges are only levied after your free ad space has expired.

MEMBERS' MARKETPLACE

The Birthday Cake is made of 15 drop pendants, 15 bugles and 2 round tabulars for a total of 32 beads.