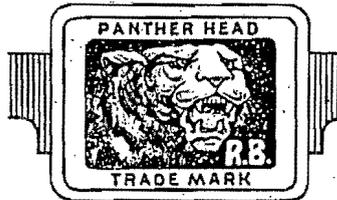


# The MARGARETOLOGIST

## Some Logos Associated with Czech Beads



Czech Export, pre-WW II



Redhammer, Czech pre WW II,  
 Germany post WW II  
 Prosser Bead Makers – they invented  
 “snake beads.”



Variations of the Jablonex logo, the  
 exporters since WW II



Fried Frères, pre WW II



“Glass Beads by Zasada”  
 The Ornela Seed Bead factory

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Keep track of the numbers above your mailing label. Not only do they show when your subscription runs out (if your last two digits are 9:2 this is your last issue), but we plan to use the numbers as a “key” to the “Members Only” area on our Web site.

### Through the Eye of a Needle

All print output at the Center has been delayed. That is why you are getting your second 1996 *Margaretologist* either very late in the year or early next year.

The culprit has been the new media. Much of my time and energy has been going into building our Web site. It is coming along, though it has been slow and erratic. As I write this, I am confident of its successful debut sometime in early 1997.

In the meantime, I am learning a lot. E-mail now comes from around the world to discuss an increasing number of projects.

**If you are on line, send me your e-mail address.** You can also soon get your *Margaretologist* from our site, complete with color illustrations and maybe more.

You can now contact me here at [pfjr@northnet.org](mailto:pfjr@northnet.org). Our site address is [www.thebeadsite.com](http://www.thebeadsite.com).

For those of you who cannot envision using a computer to communicate, we will still be here, **printing on old fashioned paper.**

This issue contains articles researched on recent trips. The Czech bead piece resulted from last year's European Tour, for which I want to thank the **Northwest Bead Society** again for their support.

Two of the other articles are from lecture-research in Denver and Washington, DC. Special thanks go to Joyce Herold, Pippa and Mogens Fog, Charity Jackson and Bly Straube. Many other people were most generous with hospitality, time and energy. I am grateful to all of you.

The third "graduating class" of all three Bead Identification Workshops was in Washington in November (the first was in San Antonio in March and the second in Denver in September). This is a growing body of people who are well informed on the basics of bead research and the dangers of mere speculation. Congratulations!

### CALENDAR

- ⇒ To April '97 -- Possible West Coast appearances L W
  - ⇒ April-May '97 -- Indonesia and India Bead and Art Tours D
  - ⇒ May - July '97 -- India: Northern Capitals Project C R
  - ⇒ August-September '97 -- possible Midwest appearance L W R
  - ⇒ October-December '97 -- Ghana R
  - ⇒ January-February '98 -- Berenicé, Egypt excavations C R
  - ⇒ March '98 -- Bead Expo, Santa Fe D L W
- C = Consulting, D= Directing, L = Lecture, R = Research, W = Workshops

### REMEMBER!

- ✓ If you are on line, send us your address.
- ✓ If the last digits on your mailing address are 9:2, it's time to renew.
- ✓ Notify us of any address changes
- ✓ Each class of membership receives free advertising space and free Bead Identification Certificates or Research Reports
- ✓ Memberships make wonderful presents
- ✓ Encourage your Bead Society, shop or institution to support us and all bead research groups

### ERRATA

[For 9:1, listed by page/column/paragraph/line]

- Everywhere: La Tène is correct; Trèves is correct
- 5/1/2/12 barrel-shaped
- 5/2/3 "oppidum" for "oppida"
- 6/1/1/7 Jura Mountains
- 6/2/4/last "England," not "Britain"
- 7/1/1/3 Ostrogoths
- 7/1/3/2 Funen, not Fuen
- 7/2/1/6 A.D. 950-1050
- 7/2/1/9 Dinas Powys
- 10/1/2/6 "led" not "lead"
- 13/2/3/4 Tenochtitlán
- 14/1/3/1 Colección

**Yet again, Margret Carey wins the Margret Carey "Gotcha" Award and receives another bead sample card. She now calls herself "Typo-Spotter Extraordinary to the Margaretologist." I guess she is. But you could win bead sample cards, too, by beating her: one point per typo, three per error of fact.**

# The Czech Glass Bead Industry Today

One of the highlights of last year's European tour was a revisit to Jablonec nad Nisou, the center of glass beadmaking in what is now the Czech Republic. The last time I had been there was in 1979, and much has changed since. The place is noticeably more prosperous and more lively and the fear of talking to outsiders is gone.

With my travel schedule and the vagaries of the Czech Railroad, I arrived unannounced late at night. Over the next few days Vladimir Veseley, now director of Jablonex, the exporting house, Vladislav Chvalina, the former director, and Petr Puš, a member of the Jablonex staff, hosted me. From interviews with them and trips to beadmaking facilities, I gathered much that brings us up to date on the industry.

## Politico-Economic Changes

Two outside events have made changes on the Czech bead front. The first was the closure of the Venetian seed bead making concern, the Conterie, in 1993. The disappearance of the old rival increased the Czech seed bead business, but not by a great deal.

Even without Venice, there is growing competition from elsewhere, in particular Japan and Taiwan. Taiwan is seen as a growing threat because it produces good beads at low cost, though its range is still limited. Neither France, India, Korea nor China are considered global players in this segment of the industry.

Seed beads remain the core of the industry. At the end of 1995, it was estimated that 50% (in value) of the glass beads made

in Bohemia were seed beads, 30% were molded (the Czechs call these "pressed," but the term means something different in English), 15% fire polished (faceted beads with a small amount of lead) and 5% lamp wound.

Even more important than foreign competition has been the internal story of freedom coming to Czechoslovakia in 1992, and the division into the Czech Republic and Slovakia half a year later. The bead industries, like all industries, had been under state control since Czechoslovakia was joined to the Soviet Block after WW II.

The newly liberated industry is changing quickly. The major seed bead maker is the Ornela factory in Zásada, a small town southeast of Jablonec. Ornela is in the being privatized. Currently it is jointly owned by many different concerns: management, employees, banks, other glass and bead companies and the local governments. In a few years it will be totally privatized.

The major exporter remains Jablonex. It had been about 30% privatized via the coupon or voucher system by late 1995.

Both molded and lamp-wound beadmaking have also undergone significant changes recently. At least some of this work had formerly been done in prisons, often with prisoners of conscience as the major victims. Now, however, the scene is different.

An estimated 200 to 250 families (many families supplying more than one worker) are involved in making molded and lamp-wound beads. Of these, about three fourths make molded beads and a quarter lamp-wound beads. The major molded bead factory is Sklenceňá Bižuterie at Alšovice,

while the largest lamp-wound factory is Liglass at Lišný. Each employ 200 to 300 people. There are three or four smaller (20 to 30 employees) molded bead factories and two or three of about the same size doing lampwork. Of all the people working in these segments, there are probably only ten to fifteen totally independent families.

There is a private jobber who buys seed beads from Ornela and gives them a pearl coating. There also remains a small company making wooden beads. Before 1989 it was named Tofa. It is now called Detoa.

The two major glass making factories are Jizerské Sklo at Lučany and the Desná Division (at Desná) of Ornela. Glass is not only used in the Czech Republic, but is also shipped to Germany. After reunification, German glassmaking was hard hit by cheaper imports from the former Eastern bloc. The beadmakers of Kaufbureun now buy most of their glass from the Czechs.

Jablonex remains the major exporter of Czech beads. It is divided into three departments. The largest handles beads. The second one exports buttons, glass figurines, cabochons and garnets (still cut in the village of Turnov by the Granat Company). The third deals in ready-made costume jewelry.

By far, Jablonex's major exports are seed beads and molded beads. They deal with few lamp-wound beads, which are exported mostly through other channels. As a quick measure of Jablonex's export, I counted the sample cards in the so-called "Bead Room" of the Jablonex headquarters. These are kept neatly in specially built boxes, with 20 to 25 cards per box. There are 24 boxes of molded beads, five of lamp-wound beads and seven of pearlized beads.

#### **Molded Bead Production**

Molded beads have distinguished Czech production from that of other beadmakers

for more than two centuries. While the "golden age" of these beads is now past, the figures above show that they remain an important element in the Czech bead industry, about 30% of output and second only to seed beads as an export.

Petr Puš arranged for me to visit a typical small scale molded glass bead shop. Self-employed Břetislav Jelínek lives in Alšovice. He was not born in the Jablonec region, but in southern Bohemia. He came to the area for family reasons about 1960. Initially, he worked for a state concern, but in a few years set up his own beadmaking shop. It is interesting in the light of what we know about state control of the glass and glass beadmaking industry in Czechoslovakia that an individual could set up independently around 1965 at the height of state power.

To begin, he had to pool his resources to buy a beadmaking machine for about \$US3000. The machine heats glass in a small crucible. He removes some on a pontil and shapes it into the width and thickness of the beads he is making. He then puts the hot glass into the "mouth" of the contraption. As the glass slides into the machine, the mechanism brings the upper half of a mold down onto its lower half. This clips off a piece of glass to form a bead, while a pin slips through the mold to perforate the bead.

The machine makes five to eight beads in a row, each separated by a small amount of glass "flash" that breaks away with virtually no effort. The flash leaves rough seams and the beads are sent out (most likely to Skleňná Bižuterie) to be smoothed. Jelínek can make thousands of bead styles, each from its own mold he inserts into the machine.

#### **Seed Bead Making**

I also visited the Ornela seed bead factory in Zásada with Puš, guided by Jiří Scheib of the Desná (glassmaking) division. It was a

wonderful tour. I was frustrated only by the fact that I could not take as many pictures as I had wanted.

Three different operations draw glass into tubes in one building.

In one, a continuous tube of glass is extruded from a machine operated by a worker who "feeds" glass into the machine from two furnaces. He only needs to do this occasionally. Much of the time he sits idle. I could not see the machine, as it is built under the floor. It is used for special glasses, especially those to be struck (cooled and reheated to bring out the color). Ruby red is the most important glass in this category. The two colors being used on that day were ruby and opaque white for "white hearts."

Another operation involves several men working at three or four furnaces. Each removes glass on a scoop and pours it into a mold to form an ingot, weighing 7.5 kg (16.5 lbs.). Iron rods ("pins") are inserted in the center of the ingots while in the mold. The ingots are carried into another room with about a dozen tube drawing machines. As the glass is drawn into tubes, the pins give them square, triangular and other hole shapes.

I have never heard of such drawing machines. I wonder if they are the ones patented by Josef Riedel in 1896 (Neuwrith 1994:107). With their small capacities they could have served specialized functions after the introduction of the Danner machine.

The third operation is the classic Danner machine, originally patented in 1917 by Edward Danner of the Libby Glass Co. in Toledo, Ohio. It has been the leading producer of tubes for seed beads for a long time. My work with seed beads in ethnographic collections suggest that diameters became rather uniform in the 1920s (colors had become uniform in the 1860s, but lengths not until the 1940s). This suggests

to me that the Libby Glass Co. may have sold Danner machines fairly early to both Venice and Jablonec. After all, Libby never made beads, and these industries were customers for their machines, not rivals in their finished products.

The Danner machine heats glass in a series of upper containers and sends it down a long, tapered, hollow ceramic tube, called a mandrel. The glass wraps around the mandrel and falls downward (the mandrel points earthward). Compressed air blown through the mandrel forms the glass into a tube. As the tube emerges from the machine, it is pulled along by a conveyor system (also invented by Danner), so that when it reaches the end it is fairly cool and stiff.

All three tube drawing operations take place in a single building. The finished tubes then pass to an adjacent building, where they are refined.

They begin at the top (fifth) floor. At each floor an operation takes place. The semi-finished products are then dropped through chutes to the next floor, gravity transporting each stage of beadmaking to the next.

On the top floor, women sort meter (yard) lengths of tubes by diameter, sending them down to the next floor through sieve-like funnels. On the next floor women slice the tubes at a machine with a continuous blade. The segments fall to the next floor.

On this floor men mix the segments with dolomite and feed the mixture into a special furnace with two steel sleeves rotating opposite each other. The sleeves have spiral grooves, and the segments run down through the grooves. They are thus tumbled and heated at the same time, rounding them off and popping out the far side of the furnace. The dolomite is cleaned off in a large water vat with a central rotating blade.

The rounded beads then go into a machine that shakes them over a sieve and sends them down to the next floor, passing

through a complex series of cardboard tubes, again sizing them. Even with all this sorting, you look into a vat with a million beads and there are still some of the wrong sizes or even colors.

I think the most interesting thing I learned about seed bead production was how color lined and silver lined beads are made. Historically, lining was done by:

- a.) Running a dye-impregnated string through the tubes,
- b.) Dunking beads into dye and then carefully wiping off the surfaces by hand or
- c.) Sucking the colorant (usually metallic) into a tube (Neuwirth 1994:62-6), as is done today in India.

In the modern industry, cut segments are put into a tub of paint or silver ammonia nitrate and coated all over with the material. Then they are heated and rounded in the furnace with the two cone sleeves. This removes all the exterior paint or silver, leaving it only in the perforation. The silver (but not the paint) is recycled.

### Lamp Beadmaking

Because of my schedule, I was not able to visit lamp winders. I was, however, overwhelmed by the variety of lamp wound beads on the sample cards of Jablonex's "Bead Room." Many techniques were used, and the diversity of styles was amazing. Had I seen many of these beads independently, I would have thought they were post-War Japanese.

I learned something about four hollow spherical beads in the Center's collection. They look as if they were made from glass string. They have tiny holes with white perforation deposits. A dealer in Venice gave them to me, saying they were made there for Coco Chanel. I do not know what the designer connection may be, but these beads are (and apparently have been since

the 1930s) made by the Machačka family in Skuhrov, not in Venice.

### A Glass Sample Book and the Question of Glass Colors

Several people I met in Europe had sample books made by binding a dozen or so pages together. Most were made by the famous glass house of Riedel [Riedl], the leading glass family in Bohemia, who was expelled from Czechoslovakia and moved to Austria. The company still makes glassware and brags that it is into its tenth generation of Riedel glassmakers.

The sample pages are filled with glass "buttons," but they are not button sample books. Rather, the button shape was chosen because it is flat and can be sewn on easily. Moreover, with its rounded edge and flat center it allows you to see what the glass looks like when it is thin and thick, flat and curved.

When discussing this book and glass in general, some people suggested to me that the Czechs had abandoned many glass colors because the recipes for were lost during World War II.

This is a rumor to be discounted. Any color of glass can be made today, but it is only economical to produce six to eight hues of a color group. New colors are sometimes added as fashion changes. It is not easy to develop new colors and the major factories would be reluctant to do so. For that, they would have to be paid very well and a minimum order of perhaps 200 tons would be required.

### The Future

What is in store for the Czech glass bead industry? As we have learned over and over, the status of bead industries, large or small, depend in no little part on the status of the society in which they operate.

I grew up in a Bohemian town in central Kansas, with classmates named Swobada, Swaty, Jelinek, and Pfloughoft and relishing the pastry kolači. When I first visited Bohemia, it was like returning to high school. It still felt that way this time, sixteen years later, but now it also feels more prosperous, more lively and much happier.

The Bohemians are smart folks and real survivors. I think things are only going to improve for the bead industry if for no other reason that the Czech Republic is developing so fast. If you recall from the last issue, Bohemia (but not yet the mountains, because technology [infrastructure] did not exist to live there) has been a major glass-making center for 2600 years or so.

The people who are becoming leaders in the new Czech glass bead industry are con-

fidant of the future. There are plans underway to produce a first rate, cheaper "delica" style of bead and of working out an economical way to prevent lined beads from flaking out. The apparent increase in the numbers of small beadmakers is also encouraging, and their output shows a willingness to innovate.

How strange now that verse from van der Sleen [114] -- "In general the glass beads of Gablonz are not distinguishable from the products of Venice." -- strikes our ears once again.

#### REFERENCES

- Neuwirth, Waltraud 1994 Beads from Gablonz/Perlen Aus Gablonz Vienna: Neuwirth.  
Van der Sleen, W.G.N. 1973 A Handbook on Beads Liege: Halbart [1975 York PA: Liberty Cap].

# A Wampum Belt in the Denver Museum of Natural History

#### Introduction

During my last visit to the DMNH in September I was fortunate that their wampum belt was off display because I was privileged to study it.

**Wampum** is the most important bead in American history, yet sadly misunderstood. Its use originated a century before the coming of Columbus when **Hiawatha** gave the Laws of Confederation encoded in

wampum to the five (later six) nations that formed the **Iroquois League**.

Wampum was used at all official occasions (declaring war, calling a Council together, seating the Council and conducting its business), as well as private events that needed to be publicly acknowledged (choosing a bride, adoption, redeeming a captive, mourning, etc.). It was *never*, as even our best dictionaries say, "Indian Money."

It was used as money, however, but by European settlers. Europe refused to send coins over to the colonies on the grounds that they would be lost in the wilderness. So, this little tubular shell bead was adopted as legal tender, eventually by all thirteen original states. One could buy land or a ticket for the Brooklyn ferry with it, pay taxes and put it in the collection plate.

The economics of wampum in the early years of colonization were simple. The shore-dwelling nations, most importantly the Narraganset, made the beads, mostly in their spare time and during the winter. The aggressive Pequot, living inland, demanded the wampum as tribute and traded it to the Iroquois, farther inland. The Iroquois also received wampum in tribute from other nations. They were widely recognized as the most powerful polity north of Mexico.

The Dutch seized the opportunity to increase the production of wampum by giving away European drills (100 were part of the deal for Staten Island). They gathered the surplus production and sent it up the Hudson River from New Amsterdam to Ft. Orange, where they traded it to the Iroquois for beaver. Beaver pelts made a 1000% profit by the time they reached New Amsterdam (and how much profit by the time it got to Holland, I do not know).

The Dutch told the English about this, selling them 50 pounds (sterling? weight?) of wampum. But the English just sat on it. When they understood the dynamics of the trade a couple of years later, they attacked the Pequots in the first English-Native war, the Pequot War of 1637. That war and the English-Dutch hostilities between 1664 and 1674 (ending in renaming New Amsterdam to New York and Ft. Orange to Albany), were waged in large part to control the trade in this small shell bead.

It was, however, a long time before Europeans began to appreciate the social value

of wampum among the Iroquois. On 26 March 1753, Colonel (later Sir) William Johnson wrote to DeWitt Clinton, the Governor of New York, "It is obvious to all who are the least acquainted with Indian Affairs, that they regard no Message or Invitation be it of what consequence or nature it will, unless attended or confirmed by a String or Belt of Wampum, which they look upon as we do our letters, or rather Books." [O'Callaghan 1849:[2] 635] This is considered the beginning of official European understanding of the true value of wampum to the Iroquois.

Johnson was appointed Superintendent of Indian Affairs between 1755 and 1774 (Guy Johnson, probably William's nephew and John Johnson, his son, succeeded him). During that time he increased the circulation of wampum, presenting many belts and strings to the people and nations with whom he dealt. Beauchamp [1901:394-5] asserted, "The supply of wampum and the use of belts...revived wonderfully under Sir William Johnson. He used both strings and belts with a lavish hand, multiplied emblems and ceremonies, and gave precision to many that were indefinite before... Belts became as abundant as they were a hundred years before, but often with new names. This pleased the Iroquois greatly, and they often thanked him for reviving their ancient ceremonies. There can be no question that these enlarged under his wise direction."

This "revival" in wampum use paralleled the increasing importance of wampum to the Europeans. Wampum makers were no longer traditional shore-dwelling Native Americans (of whom there were fewer and fewer), but Europeans who set up bead factories. The histories of most of these factories are imperfectly known. An early reference to one is in a journal entry in 1748 by a Swede, Peter Kalm, "The Indians formerly made their own wampum, though not

without great difficulties, but at present it is made mostly by the Europeans, especially by the inhabitants of Albany, who make a considerable profit from it.... Many people at Albany make wampum for the Indians, for it is their ornament and money, by grinding and finishing certain kinds of shells and mussels." [Benson 1966:129, 343; emphasis mine]

### The DMNH Wampum Belt

The belt in the DMNH's collection was purchased in 1974. Nothing of its early history is known, but its last three owners have been recorded, the earliest one being a certain "Beasley" of London, England. Thus the belt at one time went to England, how we may never know.

There was a Thomas Beasley who traveled through Iroquois country in 1795-97 [Weld 1799]. He understood a lot about wampum, describing the beads, the belts and some of its uses [Ibid.:389-91] {In Francis (1986:25) I mistook Weld for the traveler rather than Beasley's editor.} He never mentions acquiring a belt for himself, but it is possible he did. He also makes the curious and, as far as I know, unique, observation that, "The shell is sent in its original rough state to England, and there cut into small pieces; exactly similar in shape and size to the modern glass bugles worn by ladies, which little bits of shell constitute wampum."

The beads on the belt are similar to the size of normal "council wampum," rather than the later "trade wampum," which was about twice as large. The beads average ¼ inch (6.35 mm) in length and half that in diameter. The actual range of the black beads is 4.4 to 7.3 mm long and 2.3 to 3.7 mm in diameter, and that of the white ones 4.2 to 6.7 mm long and 2.6 to 3.2 mm in diameter. The beads are mint or virtually

so, well polished, and as far as I could tell have fairly straight holes.

The belt is long. The beads are strung on sinew in nine rows, 501 beads per row. Thus, it is five to six feet (at least two meters) long. The total number of beads (4509 - 69 black and nine white beads are missing) puts it into the category of a large belt. Jeançon and Douglas [1931:4] said, "Between 1 and 2 thousand beads make up an average belt. There are references to belts of 7,000 beads."

The beads on the belt are of two types: white and "black." The white ones come principally from drilling the columella of various whelks. The "black" is also called "blue," but is really various shades of violet. It is cut from the quahog clam [*Venus (Mercenaria) mercenaria*]. Linnæus named this species of the largest bivalve family after its function as wampum; *mercenaria* is Latin for "mercenary" and related to words for money. "Mercy" and "market" have similar roots.

What is striking about this belt is that nearly all the beads are black. Only 154 of 4506 (3.4%) are white. Predominately black belts are not completely unknown, but they are rare and usually have a greater percentage of white beads than this one.

Against the black field, the white beads form designs (the "emblems" of which Beauchamp spoke). At both ends are **diamonds or imperfect hexagons** with three white beads inside. Moving toward the center from both ends are **W** or **M** designs (the orientation of all but the bilaterally symmetrical figures changes depending upon which side of the belt you are viewing), though they are spaced differently. Next toward the center on both sides is an **X**. Two figures in the center are not duplicated. One consists of **two overlapping triangles**, resembling, but not duplicating the "W" or "M" designs and being reversed

from them. There is also a small figure shaped like an asterisk (\*) rotated 90 degrees.

The meanings of these designs can probably never be recovered. I would suggest, however, that the two diamonds/hexagons on the ends represent two villages or nations. A common motif on belts is for closed geometric figures to represent political units. When they have signed a treaty a line connecting them usually runs down the middle of the belt. There is no such line on this belt. Rather, a series of other figures (perhaps geographical such as mountains, water or crossroads?) take up this space.

Personnel at the DMNH have suggested that this might have been a "presentation belt," given by Native Americans (probably Iroquois, but possibly by other nations) to an English gentleman, either the one they dealt with directly or the King or some Lord in England. This is not out of the realm of possibility. Indeed, since this belt got to England it is rather likely.

However, the suggestion that it might have been destined for William and Mary (with those "M" or "W" figures) seems to me to be unlikely. The figures do not make these letters clearly. Belts I am aware of with written messages (many of them in Europe), have words and names written out in full. Moreover, if my suggested date (ca. 1750-80; see below) for the belt is anywhere near the mark, it is far too late. William and Mary ruled jointly from 1669 to 1694, and William alone until 1702.

#### **The Date of the Belt**

The catalogue entry at the DMNH indicates an approximate date of 1700-1799. In my opinion, this can be refined somewhat to the third quarter of the 18<sup>th</sup> century. Remember that by 1748 Kalm reported that most wampum was being made by Europeans. I believe this is European factory made wam-

pum because of the straight holes and the sheer number of beads that seem to have been made all at once. This was also when Sir William Johnson was Commissioner of Indian Affairs and wampum and wampum belts became particularly common; it was probably the height of production.

Additionally, it is suggestive, but does not prove the case, that the belt ended up in England. This might indicate that it was given to whomever was the recipient before the end of the American War of Independence (the British did not abandon New York City until 1783).

#### **The Value of the Belt**

Returning to the sheer size of the belt and the predominance of the black wampum, the value of the belt might be calculated.

One of the last official regulations of the price of wampum, by the House of Representatives of the Province of New-York, priced a white bead at six to the penny and a black one at three to a penny, a rate that had long been common.

Now, that may not sound like much, but remember in those days money was money. That is, a penny was a pennyweight of silver and a pound (£) was a pound of silver. Not the pound Americans use, but the troy pound in which there are 12 ounces of 31.1 grams or 0.373 kgs or 0.82 lbs.

If the belt had been made in the early 18<sup>th</sup> century, when wampum was still monetized, it would have been worth £5/5, the equivalent of \$52. I seem to remember a Dickens character who lived handsomely on £10 a year; Manhattan was bought for \$24 worth of goods. Thus, we are talking about a significant amount of money.

However, by the third quarter of the 18<sup>th</sup> century wampum was no longer in general use as currency, that function having ceased in the early 18<sup>th</sup> century. It seems likely the belt was made after wampum had been de-

monitized. Wampum was probably devalued then. I have never seen data on the value of wampum in the 1750-1780 period. However, with its increase in availability and its loss of status as legal tender, it was no doubt less expensive than it had been at the beginning of the century. It is difficult to evaluate the original price of the DMNH's belt, but it has always been valuable.

### Summary History

A thumbnail history of wampum shows that it has played an important role in the lives of many people for six centuries.

**Exclusive Native Use (ca. 1390-1630).** For two and a half centuries, wampum was central to the political, legal and spiritual life of the Iroquois. The Iroquois had contact with nations as far south as the Carolinas and as far west of the Mississippi.

**Use as Currency (ca. 1630-1710).** For the next three quarters of a century, its role was largely as currency among the European settlers. During this time, two wars were fought over its control. Additionally, the native system of wampum production, trade and use collapsed. King Philip's War (1675-6) drove coastal wampum-making Natives inland from the New England shore. From about 1624 to 1655 the Iroquois, with their new Dutch guns, fought a series of wars resulting in their exhaustion and the migration or destruction of many nations. By the end of this period, wampum was demonitized.

**Diplomatic Revival (1710-80).** During the next seven decades wampum revived. European-run factories in Albany, Long Island, New Jersey and Pennsylvania sprung up; the operation in Albany was humming along in 1748. Sir William Johnson alone gave away large amounts of wampum, as attested to in his letters and notes. Its use seems to be mostly diplomatic. The Iroquois

League had regained its strength and was brokering between England and France. Pontiac sent war belts along the Ohio and down to the mouth of the Mississippi in 1762 [Parkman 1894:[1] 186]. De Langlade in 1780 had to beg, borrow and steal enough belts to gain the cooperation of various nations in the attack on the French stronghold of St. Louis (MO) in 1780 [Lawson 1908; another goof; I incorrectly quoted the earliest date for wampum in Wisconsin as 1817 (Francis 1986:24)].

I have a list of twelve European wampum shops (or towns where shops were located). Albany may have been open by around 1740, and two others by 1760-1770. One closed in 1830. The famous Campbell factory was closed before 1905, but reopened then to document the beadmaking process for some museums.

**Wampum as Trade Beads (1780-1880).** After the establishment of the United States and until the closing of the frontier, wampum was transformed once more into a trade item. Wampum was taken by the Lewis and Clark Expedition beginning in 1704 and was acceptable east (but not west) of the Rocky Mountains. Nuttal [1819:175] reported that the Osages along the Arkansas River were "acquainted with the value of wampum." There are numerous documents about wampum being used in this way.

**Wampum as a Focus of Research (1880-1980).** In the next century, wampum became principally a subject of anthropological research. Its use had greatly declined, despite the emphasis put on it by Handsome Lake's New Religion. Much wampum was stolen or cajoled from Wampum Keepers and deposited in Euro-American run museums (for details see Williams 1986:202-4). During this period many papers appeared in scientific journals about wampum. These, combined with traders' tales and reports of wampum used for currency and diplomacy,

make wampum the most written about and well-documented bead anywhere in the world.

**Wampum Returns (1980-).** We are now living in a new period for wampum. As part of a general movement among Native Americans, the demand for the return of cultural property has been increasingly fulfilled. For the Iroquois, the process began when three face masks were repatriated by the New York State Museum in 1984. Newspaper accounts of the ceremony quote Onondaga Chief Oren Lyons as demanding the return of wampum. He said it was a "hot item" that sold for "phenomenal" prices on the antiquities market.

In 1988 the Museum of the American Indian/Heye Foundation (MIA/HF) in New York returned wampum that George Heye had known was stolen and bought anyway in 1907 (Williams 1988). The next year, the New York State Museum handed over 12 wampum belts to the Onondaga.

The process continues. In July of 1996 the MIA/HF repatriated no less than 74 wampum belts and strings, in a run-up to their move to Washington to join the Smithsonian.

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## SHORT NOTES from the CENTER

### BEAD SAMPLE CARD COLLECTION

Several people have been generous donating sample cards for this collection. They include Rudi Schneider, Cipora Kronen and Ferri, Ruth Mary Pollack, Joan Eppen, Itie van Hout and Marinus t'Hart, Masayoshi Katsuoka and Steve and Gwenn Yapple. Several people have also let me photograph cards or donated photographs of cards. They include Stefany Tomalin, Margret Carey, Vivian Gonzales, Jablonex, Rudi Schneider, Gerbrand and Ineke Kingma, and the Hudson's Bay Trading Post.

In addition to new items, I have found time to sort the second half of a large purchase made earlier from a major New York importer. Of some 350 different cards, about 100 complete a series sent from Germany in the 1960s. These are all plastic beads, and come with important documentation -- letters with dates, prices and bead-makers' names. This provides a unique re-

cord of this phase of the bead trade. Several older cards were also in this lot.

I am also working with some other depositories of important card collections. The aim is to publish such collections in full color with descriptive notes.

The Bead Sample Card Project [see 1994, 7(1):3-4] aims to preserve, document and publish as wide a range of these significant objects as possible. A small area in the Center is now devoted to them. Visitors have access to the cards, and photographic and other documentation. The Center is developing into a major depository of bead sample cards.

#### HORACE C. BECK GRANTS

Jointly administered with the **Chicago Midwest Bead Society** (CMBS), these are mini-grants given mostly to students in developing countries. The goals are to support new bead research and to encourage students to take beads seriously.

Changes in the CMBS management have not affected the Fund's work. Two new grants were awarded as the Fund changed hands in Chicago.

One was to Jane Henrici of U. Texas, Austin to attend a conference on indigenous crafts in London. She has been working closely with clay beadmakers in Peru. A second grant was given to Alok Kumar Kanungo of India to extend his fieldwork among the isolated Bondo of Orissa state.

As we go on-line and the Beck Fund receives more publicity, it is likely we will receive more grant requests. Ayla Phillips (of the CMBS) is making an appeal to Bead Societies for funding. I have been donating half the money I receive for informal bead identifications where I have been speaking (Denver and Washington DC lately). The other half is donated to the Bead Museum.

We are always grateful for donations and suggestions.

#### BEAD IDENTIFICATIONS

The most interesting recent identifications have been beadwork pieces from Indonesia. One from Sumatra was especially intriguing because of the heavy use of Chinese coil beads in its design.

The most unusual identification was for "treasure hunters" in the Southwest. They thought they had stumbled across a cache of beads, but what they had was an old fossil bed full of crinoid stems. Crinoids have been worn as beads, of course, but there was no evidence for wear in this group.

#### RESEARCH REPORTS

This is a new service of the Center, giving written answers to queries, much as Bead Identification Certificates are issued. Our first query was on the use of translucent seed beads on the Plains before 1870. They were available, but not used much.

The second request came from a publishing house that wanted statistics on the bead trade to incorporate into problems used in a fourth grade arithmetic book. They chose some from West Africa. Beads do get around, don't they?

#### THE LAB AND THE LIBRARY

We have extended the library, giving it a reading area stocked with references. Periodicals are now shelved separately. We added *Webster's 3<sup>rd</sup> International*. Won't someone donate the *Oxford English Dictionary* (the mini edition is O.K.)?

At the Beck Lab I scrubbed with acetone, ground with a file and finally smashed with a hammer a piece of "apple coral" given me at a Workshop. It is a light reddish, porous coral, thickly coated with a resin. The Lab could still use a good microscope with a hood to hold a camera.

Well, it's the holiday season. I can wish, can't I? Have a Bright New Year.

**Beads at Jamestown:  
A First Look**

Jamestown, Virginia, the first permanent English settlement in North America, was settled in May 1607 on an island in the James River. Time has not been kind to the site. The river has eroded several hundred feet of its shore.

It was long assumed that traces of the original triangular fort were lost. However, during the last three years of excavations under William Kelso by the **Association for the Preservation of Virginia Antiquities (APVA)**, the outlines of the fort have been traced. A wealth of artifacts and an English burial have greatly added to our understanding of the early years of the colony.

To date, 306 beads have been excavated. They vary widely in material and type. I hope to help the APVA catalogue them fairly soon. In the meantime, my initial examination and cataloging by Bly Straube, curator of the APVA Jamestown Recovery program, have found evidence that changes how we should look at some beads in the Early American trade.

**The Spanish Connection**

Since the pioneering work of Goggen and Fairbanks [Fairbanks 1968], faceted, seven layered chevrons and long, square tri-layered Nueva Cádiz beads have been taken as signs of early Spanish penetration.

Chevrons are known to have a global distribution. Nueva Cádiz beads have hardly been recognized outside Spanish colonial areas. Some scholars even thought they might have been Spanish made.

Nueva Cádiz beads were also considered good time markers. Fairbanks suggested a 1560 cut-off date for them. Later scholars agreed. Deagan [1987:163] said, "Beads of Spanish colonial Nueva Cadiz occur only at sites with a pre-1550 occupancy..." Most

recently Smith, Graham and Pendergast [1994:41] averred, "Any provenience that contains Nueva Cádiz beads probably pre-dates 1550 or 1560..." They do note that the small dark blue variety may have been in use as late as 1600 [Ibid.:43].

**The New View**

These ideas might be appropriate in Spanish colonial situations, but they do not fit everywhere. As reported here, chevrons and Nueva Cádiz beads appear together in Fustat (Old Cairo) [1995, Issue 19:10]. They were also found together at Vohémar, Madagascar [Thierry 1961:117-8; Vernier and Millot 1971:157, figs. 160-2]. Neither of these places have any Spanish affinities.

Nor did Jamestown, which was decidedly anti-Spanish. Yet, at Jamestown, along with Early (Striated) Blues and ten Gooseberries are three faceted chevrons and 35 *Nueva Cádiz beads*, large and small. The latter constitute 11.4% of the assemblage.

Note the date: between 1607 and 1610, a half century later than anyone would have expected them. While the Spanish may not have stocked them, they were evidentially still in production then.

Jamestown forces us to reconsider that: 1.) These beads are not exclusive markers of Spanish contact, and 2.) They were being produced at least as late as 1600 - 1610.

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