Select components shell show exhibits

John Timmerman

The genesis of this essay began as a presentation I made to the North Carolina Shell Club in May 2018. I was invited to present techniques on producing exhibits for shell shows. The presentation was an expansion and an exhibit with the same title that I entered in the 2015 North Carolina Shell Show. Though not my first document concerning building a shell show exhibit, it delves more deeply into the subject.

This essay concerns scientific shell displays. Art and crafts are an important element to many shows but require a different article.

My original concept was an explanation of what is seen and why by the general public attending the show. We may not realize that there is a lack of understanding as to why one exhibit is decorated with top

awards and another, not. Both feature impressive shells. A parallel are flower shows I have attended. I see displays of gorgeous flowers, but can only guess the criteria of why some flowers merit top honors.

Building an exhibit and sharing it with the public in a shell show is not as hard as it may appear. Here I present ideas and strategies to a successful adventure to this end. When all is said and done, it is natural to experience reservation about the exhibit, however, when the show is running and you see the enthusiasm and attention the visitors are according your work, there is tangible success in sharing with the audience the enthusiasm for shells and maybe even imparting some knowledge in the process. It makes the trouble well worth it.

My goal is to assist exhibitors in shell shows at building exhibits — beginner and experienced alike. This presentation is built upon my personal opinion and experience accumulated during three decades associated with shell shows. I aim to help you build a good exhibit, but I cannot guarantee top honors. There are several paths to the summit. This is one.

Awards:

To promote a high professional standard in exhibits, an award system is employed. The amateur exhibitors become better "citizen scientists" via the high standards in exhibiting the award system promotes.

Museums and universities seldom have the necessary staff or funds to perform all of the studies and research they wish to do with shells. Well-trained citizen scientists are a valuable resource to professional researchers, thus the awards system benefits these institutions.

Individual awards promote exhibits that their sponsors define as especially important. If no single exhibit



A shell show display is both educational and a chance to display the wondrous and beautiful aspects of nature to a broad spectrum of participants – while at the same time competing for an award for a scientific presentation.

in the show qualifies for a given individual award or trophy, it is not awarded. The awards are sponsored by national, local, and private donors. An exhibit earning no award is not necessarily a bad exhibit.

Most shell shows, as we know them, include awards. Awards recognize excellence in scientific presentation. Simple errors in production can reduce the chance for earning an award, so do be careful while building an exhibit. World class shells may not be enough to offset presentation errors. Awards hold an importance beyond boasting rights of having earned one or more of them. They encourage us to present accurate and well thought out exhibits, better to entertain and educate the public. Learning something wrong is challenging to unlearn. Awards keep us focused to avoid the pitfalls inherent in assembling a display. Even when you earn an award, talk to the judges about your exhibit. There is always something to learn from these valuable resources. An exhibit meriting a top award may be improved with new ideas or technique. Have a thick skin. Pointers to your exhibit are offered as constructive advice and help, with no

Fellow exhibitors may be flattered by questions as to how they prepare exhibits. Do respect limits! There may be strategies to success they are unwilling to share. Additionally, it is not uncommon for collectors to be reluctant to share with the world a favorite resource from which they collect shells. During set up or strike down at a show is not the time to ask questions, even of those who have been friendly and willing to discuss ideas with you in the past.

Anonymity:

Rules outlining shell show entries generally define that in no part of the exhibit during judging can there be any exhibitor identifying features, including photographs and or the name of the entrant. That said, anyone who is or becomes a regular exhibitor at shell shows is often known to the judges by the cases used for display and the style of a given exhibitor. Nonetheless, if there are images of you and your name, cover those parts before judging takes place. Before packing the exhibit to travel to the show, consider covering any of those features. During the hectic time of exhibit set up it is easy to forget this small detail. Forgetting may lead to the exhibit being disqualified.

Who is your Audience?

The question of who is your audience or customer is important to planning a shell exhibit. Everyone who sees your exhibit is a customer. We want to make our customers happy and have them desire to return. "People interested in shells" is perhaps too broad an answer. By virtue of where your exhibit will be shown, a shell show, you have a good chance that your audience will be interested in shells.

At a shell show there are subsets of people interested in shells. For example there are experienced, serious collectors who know a great deal of the science about the subject and speak the language of the professional conchologist. They are in contrast to a casual visitor who likes shells but may know little more than the most basic of popular terminology. The first person may know a large, orange lipped mollusk found in North Carolina waters as Busycon carica (Gmelin, 1791) and that it is a gastropod, and a predator specializing in bivalves. The second person may know the same shell as a knobbed whelk or even simply "conch." They may have little idea where the shell comes from much less that it was produced by an animal akin to a garden slug. They may have concluded that such shells are made by a hermit crab as that is the only time they have ever seen anything living in a shell.

I prefer to speak to the second group. They are a majority of people that visit shell shows and are an important aspect of the mission of the endeavor: to share knowledge and appreciation of shells and to promote interest in shells to the public. The serious shell collector may be accompanied by family members or friends with far less knowledge of the subject. I give priority to labelling shells with popular names and speaking in understandable language. For me an exhibit with a high fog index puts off many unfamiliar with the technical aspect of shells. I do embed technical information in the presentation, including accurate scientific classification and source data. It is a tightrope walk. One must adhere to the accepted scientific approach to convey good information, but not lose the customer with a budding interest. Judges are professionals and will certainly catch inaccuracies in scientific presentations. As mentioned, it is hard to unlearn wrong information, so take your presentation seriously and try to convey accurate information. The beginner you connect with today may go on to be conversant in the language of the professional tomorrow.

Most subjects have been done:

It is challenging to create an exhibit theme, idea, or variation that no one has ever done. I find it best to assume



Fig. 1 This shell has been or is presently called or classified as: conch, knobbed whelk, lightning whelk, *Busycon carica* (Gmelin, 1791). None is incorrect, but scientific accuracy dictates that the last classification be included in your exhibit regardless of the choice(s) of other names. The judges will look for *Busycon carica* (Gmelin, 1791). Selecting one of the other popular names is an important first step to connecting with your customers.

all ideas have been done at least once and not conclude my effort will pale compared to others. Worrying about originality and what others have done will defeat the idea before it even begins to bear fruit. Your approach will have unique elements, even if the subject has been done a hundred times. While awards are offered to promote excellence in exhibits and science, guard against losing the goal of connecting with your audience. The awards are important to the equation, but run with your idea and build a solid exhibit that successfully communicates the story. Accolades received will be icing on the cake.

Tell a Complete Story:

Your exhibit will be examined by judges who likely know the subject by heart, but never assume that any information is not important enough to include due to the skill of the judges. While the judges and advanced collectors know the 'whole' picture and may not need minor details to arrive at a conclusion, the person who knows little can easily be left with questions. The judges will review the exhibit as if they have never seen the subject dealt with before and ask themselves, "Did it answer my questions?" "Did it create unanswered questions?" The judges may even see or learn something new from your exhibit.

That said, when developing a subject look carefully at all that needs to be included in order to tell the complete story. If your original idea grows into something too big to include complete information, it is probably time to reconsider the original idea and maybe establish some limits. Refine the idea to keep the exhibit within manageable size for the resources available to you. For example you may want to show a complete collection of worldwide cones. That has the potential to be a very large exhibit! If you have

three easily portable cases, the chance of fitting them all in without serious omission is high. A solution might be to profile cones from a specific region of the world, such as the Caribbean or West Africa. Even the Indo-Pacific will likely need more space than those three cases provide. Perhaps a focus on "glory cones." Cones with netted markings might be considered. By defining the exhibit as a profile or a sampling of worldwide cones reduces the need to represent all species. By defining a goal, you have a defined a path and needs therein.

The introduction must state the intent in simple language. A single line or short paragraph is ideal. Your audience is likely to have a short attention span. Do not risk losing them with too many words.

Protect Your Exhibit:

Before going any further, for the safety of your display, covered cases are a must. It is intuitive to add to the experience via touching and handling the shells or other items you have on display, but even a closely watched exhibit takes only seconds for an inquisitive person to handle specimens when you or a proctor looks away momentarily. I had a scare at a show when it was time to pack. I removed a cover from a display, wrapped a specimen for shipment, and turned to place it in a box for transfer. When I turned around seconds later a child was picking up and dropping the other specimens not yet packed. I gently admonished him to stop and he replied, "You removed the cover from the case!" You do not want anyone handling your shells. The cost of protection is worth the peace of mind.

Another way of looking at it is do you want to be responsible for damaging someone's shell? Even experienced collectors who know better are tempted to handle something that is not covered. If you have never damaged one of your own shells, you belong to a very exclusive club. You certainly do not want to drop another collector's shell! Forgiving someone for damaging a prized specimen is far easier than being the person who did the dropping. It is better not to tempt the devil. Cover everything up!

Cases are like a frame on a picture. They can add positively to the presentation or they can damage it. If you have no cases and begin to shop you will quickly realize there can be a high cost to good cases. A very basic shadow box with a glass cover is all that is needed. How fancy the cases are is up to you. Expensive cases, while beneficial to the presentation, do not guarantee prestigious awards. Be sure it is neat. The glass or other covering must be clean and not scratched. If you have the talent and can build your own cases you can realize a cost saving. A friend or club may have cases you can borrow. You may find a case in a tag sale that was made for other items that will work great for shells.

Covered Case vs Uncovered:

It is natural to want to see the side of the shell that is facing down, especially ones with which you are less familiar. An uncovered shell will be turned to satisfy this curiosity. Similarly, a book may have significant value and leafing through a copy on display is a natural instinct. Perhaps there



Fig. 2 The covered case provides protection and security to your display. The peace of mind will allow you to pay more attention to your 'customers' rather than worry about protecting your display.



Fig. 3 The uncovered case is certainly accessible to viewers, but the associated risks are too serious to ignore.

is information that a displayed book can perfectly provide. All well and good, but do you really want everyone leafing through your book? As the owner and exhibitor you will rest more easily knowing that there is a good barrier preventing such actions. Preventing dishonorable actions such as theft is obvious.

Background Color/Case Fabrics:

The color of the lining of the case is important. Like the matte on a framed picture, it should complement or enhance the shells. No color is prefect, although some are a better choice than others. Muted gray tones are generally best with all colors. Color can be determined by the shells. For example white shells will not "pop" on a white background. A smooth but soft textile such as linen works well. Highly textured fabrics can prove challenging to keep clean and free of dust, though the shells will be less likely to move. Avoid bright colors as they tend to overpower the subject. The following examples use a New England Neptune Neptunea lyrata (Gmelin, 1791).



Fig. 4 Black – Many books and publications utilize black as it tends to make most shells stand out. Black shells are, of course, the exception. Black is challenging to keep clean as any sand, dust, or dirt will show quite well.



Fig. 6 Blue – Various shades of blue can look great. Avoid the bright ones, favoring very deep, toward black, baby powder, or gray, tones. Brown shells look especially nice on subtle blues. There are very few blue shells but those may tend to be minimized on this color. Dust on the lighter shades is less of an issue.

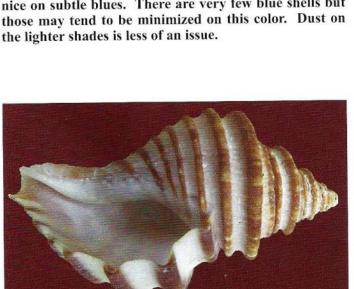




Fig. 5 Green – Use a muted green, not a bright forest green, as the latter can overpower the shells. White shells look especially nice on green. Green shells will appear dull on this color. Red shells may present a challenge as red is a complement of green and people with certain types of color blindness will have a problem with this combination.



Fig. 7 Brown – Brown presents challenges but can be used successfully. A large percentage of shells are brown and will not "pop" on this color. Very colorful shells will look nice, especially green shells. White shells look good on the darker shades.

Fig. 8 Red — A royal color that will tend to overpower shells. It is a very powerful color that attracts the human eye, which is why advertisers use it. It is a complement for green, so shells that are green may look more vivid. Exercise great caution in its application if you select it. Remember, the background should complement, not compete with the subjects of the display.



Fig. 9 Purple – Purple is another royal color and in most cases it is not a good choice. The exception may be for yellow shells. Yellow is a complement to purple and will tend to look vivid on it. A muted purple may make an exhibit showing yellow shells "pop." Exercise caution in its application.



Fig. 10 Buff – A neutral color common to many linens. It mimics the sand of many beaches on which shells are found. Dust does not show well on this color and it presents few challenges for the various colors of shells. Its main drawback is lack of contrast to the shells, thus the exhibit may appear flat.



Fig. 11 An array of knobbed whelks, *Busycon carica* (Gmelin, 1791), demonstrating variations found in North Carolina. No two shells are the same, but this display is so full the eye has trouble focusing on individual subjects and the shells may tend to start looking the same. Cases can become overcrowded quickly unless care is taken to include only those shells that support the story.



Fig. 12 An array of knobbed whelks, *B. carica*, demonstrating variations found in North Carolina. Selecting good representative shells demonstrating variations allows the eye to focus on individual shells. The selection allows space for labels. This layout does not profile all possibilities that are shown in the crowded case, but it does successfully convey the message that the species is variable. Additionally, a balanced exhibit helps the viewer gain a better appreciation for the beauty inherent to shells.



Fig. 13 Variations or groups of shells can be shown with photographs on a backboard. The same caution of overcrowding must be kept in mind. This is the austral scallop, *Mimachlamys asperrima* (Lamarck, 1819), which due to its vivid and varied colors, should be shown as a group to communicate the varied appearance of the species. What is typical? Brilliant yellow specimens command special attention, but displaying only a single form would misrepresent the species.

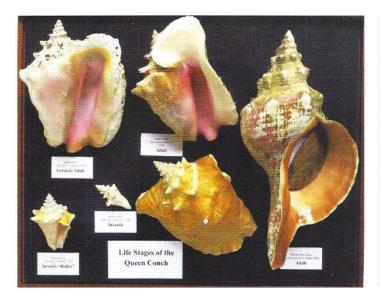


Fig. 14 Mission Creep? This exhibit includes several queen conchs, *Aliger gigas* (Linnaeus, 1758), with adult, juvenile, and very old shells. Including the Florida horse conch, *Triplofusus giganteus* (Kiener, 1840), without context makes little sense. It is tempting to include as it was a very satisfying shell to recover when collecting the queen conch, but it does not belong in the story of the life cycle stages of the queen conch. The comparative impressiveness of the horse conch risks distracting the viewer from the profile of the queen conch life cycle.

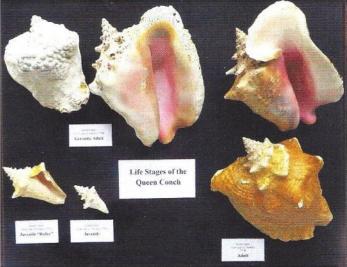


Fig. 15 Queen Conch Life Cycle. Omitting the horse conch allows inclusion of additional shells to better represent the subject and balance the display. One solution might be to include the horse conch in the exhibit via another case. When found, if the horse conch was in the act of eating a queen conch, including pictures of this activity would add to the story of queen conch natural history. Explain why it is there. Without context it has no place in the display.

Don't Crowd the Shells!

One of the greatest challenges I face in building an exhibit is which shells **not** to use. I almost never have enough cases to house every shell I want to include. Labels further limit space for shells.

I look closely at which shells are needed to tell the story completely and which ones are redundant or superfluous. It often involves omitting a favorite shell or two, which in reality add little to the story other than being a personal favorite. Put aside emotions and look at the exhibit objectively. Too many shells may satisfy the wish to show all your shells, but at the same time damage the presentation. Many shell shows have at least one category for a single shell entry. If a prized shell will not work in the exhibit there is another outlet to share it with your audience.

Stay on Topic:

While building an exhibit, new ideas will come to mind. Some may enhance the exhibit while others may add unnecessary baggage to the story. Carefully evaluate ideas that come to mind to avoid "mission creep." Does the addition enhance the story or add unnecessary information that will crowd the exhibit and at the very worst create confusion. How many cases you have at your disposal can be a determining factor as to including more ideas.

Another pitfall of embracing all new ideas that come to mind is that there may come a point where the exhibit will not be finished in time for the show. The exhibit has grown and includes more and more content delaying meeting the deadline. Keep it simple!



Fig. 16 If you display the New Caledonian nautilus, Nautilus macromphalus, everyone sees a chambered nautilus, but advanced collectors will appreciate the rarity of your selection.

Shell Selection:

Select the best shell for the job. Obviously the exhibit should include the best shells you have for the needs of the exhibit. I employ additional criteria that help determine the best shell is for my goal.

I select shells that connect to the general public and the advanced collector. The chambered nautilus *Nautilus pompilius* Linnaeus, 1758, is probably the most frequently seen molluscan species in books and general commerce. It is easily recognized by novice viewers. The New Caledonian nautilus *Nautilus macromphalus* G. B. Sowerby II, 1849, is far scarcer, but the inexperienced collector sees a chambered nautilus either way. If a specific species is not required I select the New Caledonian nautilus to represent a chambered nautilus as the general public will know what it is and it may please the eye of the advanced collector.

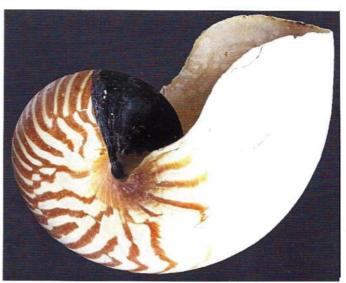


Fig. 17 On a different selection level, if Nautilus pompilius, needs to be used, the specimen shown here is one that was collected as a float shell and nothing more done to it. Polishing to make the shell brighter and attractive is a common practice where many of these shells are found. That this shell is completely as it came out of the water makes it a more natural, harder to obtain, scientific specimen. Again everyone sees a chambered nautilus, but the advanced collector sees an out of the ordinary chambered nautilus.

Few collections will ever be able to support such selection criteria in all cases, but when such can be made, seriously consider the option. Do be aware not to include an unusual shell simply to satisfy this advice, if it is not going to support the story.

Research:

Consider including photographs and field observations of mollusks. Photographs of the living mollusk, though not required, certainly enhance the presentation. The photographs provide evidence of and support research.

One should thoroughly research the subject. Record only what you observe. A good scientific rule of thumb requires that you do not add details not observed.

All exhibits require research. Listed here are some of the resources valuable to the development of an exhibit. Do not neglect even the most mundane appearing resource.

For example "The Golden Guide Seashells of the World" remains a good resource, if not the last word in research.

Books
Internet
Museums
Fieldwork
Collaboration
Field observation

Reference multiple resources, including ones that have the same information. Verification and familiarity with the information is important. Some resources may be listed as imperfect by some reviewers in their treatises, thus referencing several is a must.

Write a bibliography recording all of the resources used for the exhibit and include it with the exhibit. Be sure to include Internet sites that you may have used.

Even if you know the subject matter by heart and cannot remember where you learned it, find and cite reference for what you know. Everyone learned what they know somewhere. If you include information made through field observation carefully represent them. For example stating that the knobbed whelk eats bivalves may be a conclusion reached via direct observations. Including photographs of the mollusk in the act of such predation greatly enhances and supports that knowledge presentation.

Check Nomenclature:

Due to the possibility of a change of shell classification a stop at World Register of Marine Species (W0RMS): http://marinespecies.org/ to verify classification is a must. Though older publications such as the "Golden Guide" can still provide sound information, classification has often changed. Judges look for the most up-todate classification in the exhibit labeling; so making sure classification is up to date is very important. Even a classification that has been the same for as long as you remember may have changed. Never assume anything in regard to this! An example is the lettered olive found in the Eastern USA. For decades it was classified as Oliva sayana Ravenel, 1834. A couple years ago, in the midst of preparing an exhibit for a permanent display at a children's medical clinic, assuming nothing, I looked at WoRMS to verify the classification only to be surprised it was now classified as Americoliva sayana (Ravenel, 1834)!

Beware of Autocorrect/Spell Check!

Autocorrect can damage the accuracy of your labels. Autocorrect can change a word by as little as one letter from a Latinized scientific classification into a word familiar to many. Either disable autocorrect or remain vigilant to what it may be doing while you carefully create labels. This issue, if not resolved may compromise the exhibit significantly. Following are some examples.

- Correct: Oxymeris maculata (Linnaeus, 1758)
- Autocorrect result: Oxymeris maculate (Linnaeus, 1758)

Autocorrect changed the last letter of the species from an "a" to an "e." Caution: Changing it to read correctly once may not be enough to keep it that way. Cutting and pasting it into other parts of your display may cause it to revert to the autocorrected version.

Correct: Oliva reticulata (Röding, 1798)

Autocorrect: Oliva reticulate

The last letter of the species has been changed.

Correct: Amoria hunteri (Iredale, 1931)

Autocorrect Amoria hunter

The last letter of the species has been deleted.

Correct: Alcithoe arabica (Gmelin, 1791)

Autocorrect: Alcithoe Arabica

The first letter of the species has been capitalized.

Judging can be very close. A single typo, whether you, the exhibit builder, or the word processor produced it, being the tie breaker in some instances. More importantly, and to reinforce an earlier point, it is incumbent on us to not present incorrect information to our audience.

Proof read:

Proof read text numerous times. Ask someone to help. Read it aloud. Errors are easy to miss when writing. Spell and grammar check may not provide the correct word for your text. If possible I find it helpful to let it rest for a week then read it again.

Backboard Labels:

Limit written text. Few people are going to read "a book on a wall." A shell show provides a chance to see actual shells. Do not disappoint them. It's about the shells! That said, some text is generally needed to introduce the exhibit. Be very judicious in editing.

For backboards a brief overview printed in a large, easy to read, point size is much more likely to be read. The audience will be standing, reading from at least 4 feet distance. Numerous words printed in a small point size will soon tire the viewer if they have not immediately discounted an effort to try to read it at first glance. Include photographs, illustrations, diagrams, and maps - with text on each backboard. The mix loosens the format providing a place for the eye to rest.

Backboard Captions:

Write a description for photographs or illustrations that can stand alone as a story. Your audience may be a caption reader, skipping introductory overviews sharing space with the images. Images are the hook that draws the viewer's eye. They may also read text panels, but it is good to know that one's carefully crafted prose is not necessarily going to be read. Communicate the message efficiently and quickly.

Display Case Labels and Captions:

Place a label with each shell. A brief story via a caption can be included if desired. Numbering shells and having a key makes laying out the exhibit perhaps easier and allows fitting in more shells, but you risk giving the viewer

whiplash. Their eyes have to dart back and forth from subject to key and may tire of the exercise. If your audience tires at any point in the presentation you risk losing them completely.

Create Correct Scientific Labels:

Before creating labels for the shells it is very useful to possess knowledge of how to do so in an accepted scientific way. An article written by Walter Sage, though penned many years ago, remains an excellent reference to correct writing of scientific labels. It can be found at: "Conchologists of America Bulletin" Vol. 15, No. 1 March 1987, pg. 16

Label Hierarchy:

(diagram caption)

- (1) Knobbed Whelk (Female)
- (2) Busycon carica (Gmelin, 1791)
- (3) Collected at a minus .4 low tide, buried in mud with other Busycon carica, in front of oyster bar at the mouth of Simpson's Creek, Nassau Sound, Duval County, Florida, April 26, 2009 at 3 PM
 2. Knobbed Whelk Collected dead on USA, Winter 2005
 3. Knobbed Whelk Collected at minus oyster bar at the results of the collected at minus of the collected at minus of the collected at minus on the collected at minus of the collected at minus of the collected dead on USA, Winter 2005

Hierarchy is the order in which the labels are formatted.

- (1) As my target audience is the average person who likes shells but may not know much about the subject, my first line is a language they will likely understand, a popular name; although to the professional scientist this is the least important information to include. Leading with the scientific classification is a nonstarter for those not conversant in it.
- (2) The second entry is the scientific classification. No matter how you build labels, this must always be presented.
- (3) The third entry is the collecting data. Though not as crucial to the label (in a shell exhibit) as the scientific classification, it is important as it reinforces that for a shell to hold scientific value, a record of where it was collected is of utmost importance.

You may emphasize aspects of the label you want to draw attention to via bold and or different print size. Whichever hierarchy you employ, be consistent throughout the exhibit.

Data:

Collecting or source data for a shell is crucially important to its value for science and must be included on the label to affirm you have adhered to this goal. The novice viewer may not read that far down the label, being satisfied



Fig. 18 Double knobbed group of knobbed whelks, *Busycon carica* (Gmelin, 1791) with suggested data slips.

- 1. Knobbed Whelk, *Busycon carica* (Gmelin, 1791) No data: Range Cape Cod Massachusetts to Northern Florida
- (3) Collected at a minus .4 low 2. Knobbed Whelk, Busycon carica (Gmelin, 1791) tide, buried in mud with other Busycon carica, in front USA, Winter 2005
 - of Simpson's Creek, Nassau Sound, Duval County, Florida, April 26, 2009 at 3 PM

 3. Knobbed Whelk, Busycon carica (Gmelin, 1791) female Collected at minus .4 low tide, buried in mud with other B. carica, in front of oyster bar at the mouth of Simpson's Creek, Nassau Sound, Duval County, Florida, (USA) April 26, 2009, 15:00 hours.

with a popular name, but may decide they want to find one and read the full label to learn where it came from. Never make up data. You may have received a shell as a gift or found it at tag sale. Keying out the species can be done. Knowing where it was found is impossible.

The knobbed whelk occasionally produces an extra row of knobs (Fig. 18). These specimens can be especially prized. Wishing to enhance such a prize with data, if none is present, is tempting, but fake data is a disservice to the scientific community and other serious collectors. Beach collected shells are removed from the context of where the mollusk lived, but recording basic data remains important. Only one of the shells in this group has highly detailed collecting data. The larger specimen has none. Recording the range of the species is the limit of accurate data that may be included.

Type:

Point size is the size of printed text. There is a happy medium where a label can be easily read but not compete with the shell. Generally, labels should be readable from a minimum distance of 36 inches, or a standing viewer looking at an exhibit on a standard 29 inch tall banquet table.

Try 14-18 point size as a starting point: 14, 16, 18. Remember, many in your audience may have corrected sight where a small point size is more challenging to read.

Adhere to the format you select for labels. Changes in hierarchy are distracting. Variations in font and or point size produce the same distraction. A label is a constant, where detailed information can be found without adjusting for anything else. There is balance that can be struck between making the labels easily read yet not overpowering to the objects they are describing.

Selecting Font:

Use a simple font that converts well to italics, providing a distinct visual difference. Do not employ a decorative font, as that distracts from delivering the information. Underlined print is the printer's message to italicize. This was widely used in exhibits before the advent of word processing computers and inkjet printers. It can still be employed, although I find it very desirable to use a computer and printer as the labels are more polished and professional in presentation. Following are a few font options:

Times New Roman regular case – *italics* Times New Roman is a traditional print font. Italics appear distinctly different.

Calibri regular case – *italics* Calibri is a common default font employed by word processing programs. The difference in italics is subtle.

Arial regular case – *italics* Arial is simple clean font often used in presentations.

Guard against the word processor reverting to a default font if you have selected a different one. While creating entirely new text the program may select its default font, not the one you have been using for all prior text.

Include diacritic marks (umlauts, accents, etc.) as necessary to the author name (e.g. Röding, Récluz, etc.). Not all keyboards have intuitive functions to make diacritic marks such as accents and umlauts. These can be produced with a series of key strokes or using the symbol menu. An Internet search will yield how to do this for your computer. At the very minimum, carefully add accents with black ink to the printed label.

Label Style:

There are many ways of producing labels. I prefer one where the label is easily read, but does not outcompete the shell it is describing. How you create labels is a matter of preference. Many different styles routinely win top honors at shell shows.

Regardless of label style, a universal factor is that labels must lie flat. Curled edges and or the entire label bent are undesirable. Be aware that the environment at the show may be different than where you assembled the exhibit. What lies perfectly flat while assembling the exhibit may suddenly curl at the show! You may need to affix the labels to card stock or other stable, rigid substrates to assure they will stay flat.

Orient your labels in the same way when deployed in the exhibit. Multiple orientations tend to make them a focal point rather than a standard easily referenced place to

learn about the shell(s). An example may be to place a label at an angle different from others to assure the viewer knows it goes with a particular shell. The result of the label being positioned differently calls attention to itself at the expense of the shells.

Quality of the Shells:

For many exhibits one wants the best possible in quality of the shells. The more attractive the shells, the more attention the exhibit attracts. Broken and or damaged shells should generally be avoided. For example, if your favorite shell of a given species has a badly chipped lip and a smaller specimen is flawless, the smaller shell is the better choice for the exhibit.

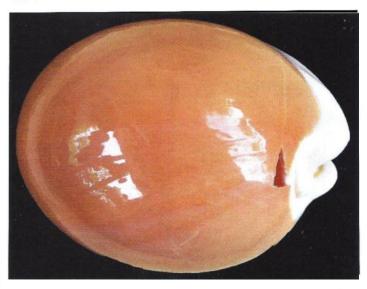


Fig. 19 A broken shell, Callistocypraea aurantium (Gmelin, 1791). At first glance this golden cowrie is a stunning example for the species. It is large and of superior color. A hole and associated cracks in the spire of this shell, caused by an accident in handling, ruins it.

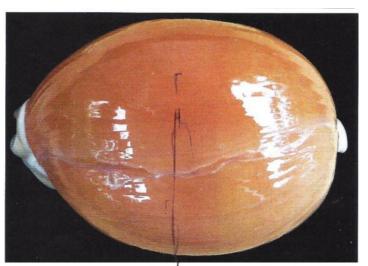


Fig. 20 Growth mend, C. aurantium (Gmelin, 1791). A golden cowrie with a natural scar. A feature many viewers would just as soon not contemplate.

Growth Mends:

Growth mends record an injury the mollusk survived. While a fascinating record of a test to the animal's wellbeing, it often interferes with the appearance of the shell thus reducing its show quality. A mollusk that lived its life without ever suffering an injury may be an exceptional shell by virtue of its perfection..

Size Does Matter (to an extent):

Despite comments I hear to the contrary, exceptionally large and perfect examples of a given species garner particular attention. Perfection is important to the equation. Some extra-large shells are not exactly perfect (to put it gently), thus not a good choice to represent a species. If you are lucky enough to possess a giant shell of exceptional quality, its scarcity factor and desirability is greatly increased making it a prime candidate for inclusion in the exhibit.

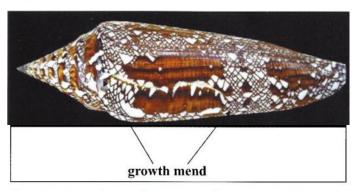


Fig. 21 Growth mend on *Conus bengalensis* (Okutani, 1968). The markings of some shells may help render a growth mend inconsequential to the overall presentation.

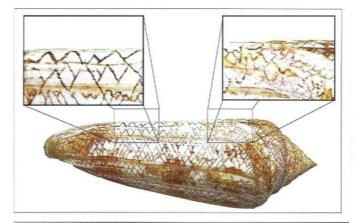


Fig. 22 Repaired Conus gloriamaris Chemnitz, 1777. Enterprising fishermen may dress up a shell that has damage or scars, to yield greater apparent value. This glory-of-the-seas cone at 141mm (a scarce size for the species) has had growth mends repaired and painted to resemble the surrounding shell. For exhibit quality a smaller, more perfect shell is preferable. A visible growth mend is preferable to a "doctored" one, if it cannot be avoided. The shell shown here verges on forgery.



Fig. 23 A Conus gloriamaris with a nasty growth scar. Strategic positioning of a less than perfect shell can be employed to include a shell that might tax one's budget to purchase a perfect example.

Show the Best Side:

The Conus gloriamaris (above, Fig. 23), at 126mm, is a scarce and desirable size. The dorsal side presents as a spectacular shell, while the reverse has a massive scar. This growth mend significantly disrupts the shell presentation. This shell is one many collectors would never include in their collection, much less in a shell show. It cost less than one tenth that of a perfect specimen, making it affordable to a collector who might not be able to consider using a large example of the species in a display. Display it damaged side down. Do not advertise that it is perfect, unless the message includes a comparison similar to what is outlined here or as an example showing the incredible vitality of a mollusk recovering fully from a serious attack by a predator.

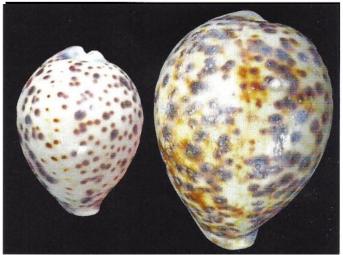


Fig. 24 Two white form tiger cowries illustrating that quality may very well be more important than size in selection for display.

Quality of the shells has bearing on selection for display. To illustrate, two white form tiger cowries are compared (Fig. 24). The larger shell, *Cypraea tigris schilderiana* C.N. Cate, 1961, at 130mm, is certain to grab the attention of the average viewer who will recognize it as a gigantic tiger cowrie, while holding the attention of the knowledgeable collector recognizing the scarcity of specimens of this magnitude. The smaller specimen, *Cypraea tigris pardalis* Shaw, 1794, measuring at a comparatively smaller size of 77mm is superior in quality. Thus to represent the white variation of tiger cowrie, the smaller specimen is likely the better choice.*



Fig. 25 *Turbo marmoratus* Linnaeus, 1758. This specimen is as they often appear when collected. Old specimens can be heavily encrusted with marine growth.



Fig. 26 Turbo marmoratus. This specimen is what lay beneath the encrustations. Showing it both as found and what lay beneath the marine growth is an informative story, one that requires inclusion of an "ugly" or uncleaned shell.

^{*}Author's Note: This example presents a different challenge. That is what classification to use. I follow WoRMS. Using a giant Hawaiian tiger cowrie and a tiger cowrie from the Philippines may be a poor example to illustrate the challenge of using a giant shell verses a finer but smaller one. To my target shell show audience they are both tiger cowries. This also illustrates the potentially difficult choice not to use a shell due to poor quality despite it being a certain attention grabber by size.



Fig. 27 A dead collected shell, Roy Bell's Bonnet, Semicassis royana (Iredale, 1914), is an example of a species rarely, if ever, taken with the original mollusk intact. These shells are typically collected with a hermit crab as occupant. The crab enters a crayfish pot set in deep water. The hard ground habitat precludes employing a trawl or dredge in an attempt to bring up a specimen with the original mollusk. The goal in this instance is to employ a specimen that is as fresh dead as possible. Author's note: I selected this shell as it fits the profile but also to reinforce the point of "Shell Selection" outlined on page 34. We are looking at a large bonnet type helmet. To the experienced collector we are looking at a species not often represented in collections. I was blown away by the first one of these I ever saw!

All shells do not have to be "perfect":

To support the story, a less than perfect presentation may be desirable.

Dead Collected Shells:

The decision to employ dead collected shells provides a complicated answer. For the most part, exhibitors include live collected shells as they present the optimum quality in the shell. The colors are the best and the lines of the shells crisp and sharp. That said, do not rule out dead taken shells. Some collectors, who as a rule never collect a living mollusk, mount excellent and award winning exhibits. In some instances even the most dedicated collector stands little chance of obtaining a live collected specimen of a particular species as they are simply unavailable. In this instance a dead collected specimen, while not meeting the criteria of the best of the best, is a necessary reality. Conversely, consider using fresh dead shells to show juveniles. Responsible collectors try not to take living juveniles. Growth series are an especially good reason to use dead collected shells as the display may include numerous juvenile specimens, an action judges may frown on.

Setting up the exhibit at the show:

Transporting the exhibit to the show presents challenges that are easy to overcome with planning. Many

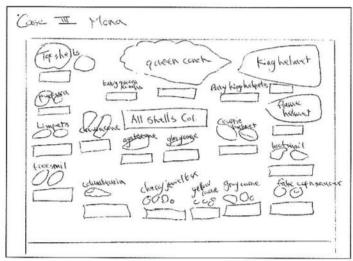


Fig. 28 A thumbnail sketch I drew mapping a case layout. Note: The case included shells collected at Mona Island, Puerto Rico. The advent of digital photography and smart phones allows the exhibitor to sidestep a thumbnail sketch. Take a picture of the exhibit before you pack for the shell show.

people transport their exhibit in the case(s) by laying a soft cloth or towel into the case on top of the content. Upon arrival, all one has to do is carefully lift the cloth, straighten everything, and it is ready to go.

My approach is to completely assemble the exhibit at the show, as my cases do not work for the transport intact method. I make a thumbnail drawing or take a picture of the layout before packing it for the show so that I have a map for show installation.

The show will rarely have extra space for you to work on your exhibit, aside from that space which you need for the exhibit. Be prepared to work in your designated space and or the floor immediately in front of it. Never place your supplies on a neighboring exhibit space.

Bring with you supplies used to assemble the exhibit so that, if for example a label falls from a backboard, you can do a quick field repair. Remember cleaning supplies.

Lint rollers for clothes are handy for removing dust or sand that may have been introduced to the cases in transport or fall out of that shell you thought was completely free of such material.

Accidents such as broken glass are unfortunate and usually impossible to correct in the limited time before judging begins. The judges understand this. During judging you can purchase a replacement so that the display will be protected when the show opens to the public.

Finally, have fun! As I stated earlier, my goal is to assist shell show exhibitors with some ideas and strategies I have found successful. Whatever works for you. Make it your display.

John Timmerman NJredstone2gr@hotmail.com