

Facts at your Fingertips

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Docents at the Houston Zoo have developed two versatile tools to help us better educate our guests:

- A set of Help Cards and Carrier Cards describing the animals at the zoo and in our Handling Collection, and
- A Docent Pocket Guide.

Improving on the adage that a short pencil is better than a long memory, these handy, easy-to-use tools put a wealth of information “at your fingertips”! The tools are an adjunct to our formal training and Continuing Education programs, and supplement the collection of biofacts and the 100 animals in our Handling Collection that the public can see and touch.

Help and Carrier Cards

Introduction

We use the term “Help Cards” for those presenting information about the animals in the Houston Zoo’s on-grounds collection. They describe a **species**, with specific information about the animals of that species in the collection (typically a number of animals). Although we have developed many Help Cards, they cover only a fraction of the animals at the zoo. A “Carrier Card” is a Help Card for an animal in our Handling Collection. The format differs only slightly between the two types of cards. In addition, the Carrier Cards are attached to the animal carrier (cage or cooler) so they require a grommet and a length of bead chain. We try to have Carrier Cards for all the animals in our Handling Collection.

These 2-sided, 4” x 6”, laminated cards present information about the animals in the zoo. The cards can be used during roving presentations on zoo grounds, Zoomobile visits to schools or hospitals, or any other interaction with the public where you are talking about an animal. A quick review of a card and you’re an “instant expert” on that animal. Coupled with biofacts or a live animal and an enthusiastic docent, this makes for an exciting interaction with zoo guests.

Content of the Cards

The following is offered as a guide. Individual zoos and aquariums will have differing species and types of animals they will want to highlight.

One side of the cards presents a full color photo of the species and its scientific name at the top of the card. The cards present basic facts about the species:

- Adult size and weight (wingspan for birds and length for reptiles vs. shoulder height for a mammal)
- Lifespan in the wild and in the zoo
- Gestation period or incubation period for egg layers
- Habitat and distribution in the wild
- Diet in the wild and in the zoo

The cards present specific information about the animals in the Houston Zoo collection:

- Name(s)
- Birth date(s), if known, or date(s) acquired (Ages are always of interest to zoo guests.)
- Parents or where they came from (e.g., wild caught or name of another zoo)

The other side of the cards provides

- a set of “Gee Whiz” facts about the animals to spice up any presentation.

Examples are:

- At full stretch, in pursuit of prey, cheetahs can cover almost 33 feet in a single stride. (Cheetah)
 - Named for the golden or white colored crescent shape on their chest (Sun Bear)
 - The kudu runs heavily and very clumsily, but its ability to leap is marvelous; it can clear bushes 8 ft. high with ease. (Greater Kudu)
 - Howls have been heard by people almost two miles away through jungle growth and over three miles away across lakes. (Black Howler Monkey)
 - Last survivor of a dinosaur that lived 130 million years ago. (Komodo Dragon)
 - An adult porcupine has an average of 30,000 quills. The quills serve as the main form of defense. (North American Porcupine)
- a list of suggested biofacts to use that help us better communicate interesting aspects of the animal to our guests during roving presentations on-grounds or other interaction with the public

Card Preparation and Management

There are several key functions that we have found necessary to make the Help/Carrier Card program a success:

- Overall design and management of the cards
- Enthusiastic card authors
- Reliable sources of animal information
- Approval of the cards by the zoo
- Logistics of physical preparation of and access to the cards

Overall design and management of the cards

The Technical Chair has overall responsibility for these cards. He/she maintains a selected listing of “major” animals on exhibit in the Houston Zoo collection that do not have Help Cards for any docent wanting suggestions on animals requiring cards. In particular, we make an effort to produce new cards when “high profile” additions are made to the collection. (Examples of such additions in recent months include two Okapi and three Giant Eland.) The Education Section staff often research these new animals and prepare fact sheets as part of the publicity package; this information can be a big help in the preparation of these cards.

I personally placed a priority on developing Carrier Cards versus Help Cards. This ensures that docents have at least the basic information on any animals they are handling for the public to see and touch. These animals are kept in our Children’s Zoo (CZ) and a selection is brought to an animal

Holding Room close to the Docent Office each day. To ensure timely development of new cards, a listing of the Handling Collection is maintained through periodic communication with the CZ staff regarding new additions (especially new species), retirements, and deaths. Cards for new animals (existing species) can be produced by copying and editing an existing card. For some species where there is considerable variation between individuals, e.g., Rabbits or Chickens, you might want to consider using a photo of the specific animals rather than a “generic” photo.

To ensure uniformity of the Help and Carrier Cards, electronic templates are maintained by the Technical Chair and supplied to anyone preparing a card. We have Help Card templates for Birds, Cats, Large Mammals & Hoofstock, Marine Animals, Primates, Reptiles, and Small Mammals and Carrier Card templates for Birds, Mammals, and Reptiles. The Technical Chair reviews and edits the cards that are developed to ensure quality levels are maintained. As a guide to anyone considering this process, as a standard practice I would suggest:

- a) Add the Email address of card preparers to your Personal Address Book to facilitate future correspondence.
- b) Keep copies of all correspondence/drafts until the card is approved (paper or electronic).
- c) Try to keep **both** sides of the cards to a single 8.5” x 11 “ sheet.
- d) In addition to an editorial review (font size, etc.), you will want to check for an appropriate number of GEE WHIZ facts, and that no questions arise when you read the card. Additions/questions should be relayed to the preparer.

Enthusiastic card authors

We encourage all docents to prepare cards on animals in which they have a particular interest. Tangible encouragement is provided by giving a Continuing Education (CE) credit for researching and creating a card. In the past, card preparation has also been a group project during the docent training class to provide the trainees an opportunity to increase their knowledge of the zoo’s animal collection. The real reward is the wealth of information and interesting facts you learn about the animal during your research.

Reliable sources of animal information

Most of the “basic” data for the cards these days comes from an Internet search. (HINT: Use the scientific name of the animal when performing a search!) As with any information found on the Internet, docents should be cautious of its accuracy. Other sources are reference books and magazine articles. The Houston Zoo has a substantial library of animal-related books and journals that often provide docents a perfect starting place to acquire information. In addition, when researching the cards preparers must contact the zoo staff for information on the names of the animals in our collection, their diet in the zoo, etc. We’ve found this “bridging” (interaction and communication) between docents and staff to have long term benefits. It’s useful for the Technical Chair to maintain an up-to-date phone list of zoo staff to facilitate recommendations on staff contacts.

Approval of the cards by the zoo

It is extremely important that all our cards be approved by the zoo. This insures that the information we docents provide our guests is both accurate and consistent with what the zoo itself publicizes. Draft cards are given to the curator or head keeper of the appropriate department as well as to the Docent Programs Coordinator in the Education Department for comment and approval. Only then are they “published” and added to the collection.

Logistics of physical preparation of and access to the cards

Once a card has been approved, and any comments added, I would suggest:

- a) Have the printed cards laminated with 10-mil plastic. This produces a very rugged card that can take a lot of abuse. (I supply the laminator with the 8.5" x 11" sheet. They cut out the front and back, and trim to size. Other laminators may require you to do that. Finished samples are useful when discussing the job with a prospective laminator.)
- b) The Carrier Cards are prepared with a grommet.
- c) Add a section (~5") of bead chain to each Carrier Card and deliver them to the CZ for attachment to the animal carriers.
- d) Insert Help Cards in a rack or other display in the Docent Office. (NOTE: The rack often sets the maximum dimensions for the width of the cards.)
- e) For each new **species** in the Handling Collection, laminate a separate card **without** a grommet and place that in the Animal Holding Room in case an animal is delivered without a Carrier Card.
- f) For each new card print a copy of the 8.5" x 11" sheet and add it to a 3-ring binder in the Docent Office that contains copies of all Help and Carrier Cards.

Docent Pocket Guide

Introduction

A docent walking around the grounds has frequent opportunity to educate our guests about the animals in the collection; help them find the nearest rest room, food area or exhibit of interest; assist them in locating their lost child; or just direct them to the exit. One could, of course, carry around a large number of Help Cards, maps and other information (in a 3-ring binder, for example, or organized with a clasp). But our chosen solution has been to place key information in a **more compact package**.

The animal information from the most popular Help Cards forms the core of the Guide (50 of the 72 pages). Other information includes emergency procedures and phone numbers, Houston Zoo facts, and key docent procedures. It is a useful, handy summary of much of the information a docent might need on grounds. And, as the name implies, it's pocket sized so you can have it with you wherever you go. (I guess this might be a "facts at your butt"!)

Content of the Guide

The following is offered as a suggestion to potential "pocket guide" publishers. You will want to tailor the information to your specific circumstances, and the interests/needs of your docents.

Animal information

The animal information is located in the center of the document. To ease the task of finding information on a specific animal quickly, the animal section is organized to facilitate quick reference. Animals have been grouped by type (Birds, Cats, Mammals, Primates, and Reptiles), listed in alphabetical order within each type, and tabs have been incorporated on the edges of each of the animal sheets. These tabs "bleed" into the area that's trimmed off when the guide is printed. Note that the alphabetical listing keys on the *species*. Thus, both the Bengal Tiger and Indochinese Tiger are found under "tiger" while the Common Zebra is found at the end of the alphabetical listing under "zebra."

The “basic” facts about each species as well as a few GEE WHIZ facts are repeated from the Help Cards for each animal. In addition, a couple of “blank” pages have been left at the end of each animal grouping so additional animals could be added later as further Help Cards are developed, or so docents can supplement the listing with information about their own personal favorite(s).

In addition we’ve included a Similarities and Differences section (e.g., Rabbits vs. Hares, Toads vs. Frogs, antlers vs. horns). Docents find this handy for common visitor questions.

Critical procedures and information

Additional information a docent might find useful on grounds is also included. The most important information (in my opinion) is placed up front in the Guide.

- Emergency Procedures (including Emergency Codes, First-Aid procedures, and Lost & Found)
- Key Phone Numbers (with emphasis on the Education Department and Children’s Zoo staff with whom docents have the greatest interaction)
- Zoo Hours (including times for scheduled events such as Alligator feeding times, Sea Lion demonstrations, and Keeper Chats)

Houston Zoo and related information

Other key information on the Houston Zoo and surrounding attractions is presented next:

- Houston Zoo “Gee Whiz” Facts (size, number of animals, food and forage consumed, etc.)
- History of the Houston Zoo from its opening in 1920 with Earl the bison to our entering a public/private partnership with the City of Houston in 2002)
- History of Hermann Park (Hermann Park, in which the Houston Zoo is located, is Houston’s 2nd largest park.)
- Hermann Park information (times, phone numbers, and costs for the various other attractions in the Park)

Docent procedures and other “how to” information

The Guide also includes information on docent procedures:

- How to...
 - Pick up and return animals (in the Handling Collection)
 - Prepare for presentations/puppet shows (A/V equipment setup, podium switches, etc.)
 - Make announcements (throughout the Zoo or in specific areas)
 - Be a docent or volunteer (contact phone number, age restrictions and a brief description of the various volunteer opportunities)
 - Use the Cold Tank (a facility where guests can touch Sea Stars and view other marine animals such as Anemones)
- Zoo Conservation Terms (definitions of SSP, TAG, Studbook, etc.)
- Zoomobile Procedures (an important aspect of our outreach program)
- Common Spanish Phrases (useful for a zoo in a city with a large Hispanic population)

Pocket Guide Preparation

The Docent Pocket Guide, as the name would imply, is sized to fit in a “pocket.” However, there are pockets and there are pockets ... and there are “fanny packs” and other places docents chose to carry information. A “pocket” guide should be sized to fit into as many of these places as possible. Ours is presently 4.5” x 6.5” -- about at the upper limit for a pocket guide.

The Guide is laid out on 8 1/2” x 11” sheets (landscape) with one page on the left side of the sheet, and another page on the right. Given the dimensions above, a considerable portion of the sheet is trimmed away during the printing/production process.

Some notes to potential “Pocket Guide” publishers: Our original guide was smaller -- 4-1/4” x 5-1/2” -- and conveniently fit on exactly half of an 8-1/2” x 11” page. This can help reduce costs of printing and fit more “pockets,” but only works if it can hold all the information you desire. Also, there may be better tools than MS WORD to produce such a document (e.g., some desktop publishing software). However, my choices were limited to the software I was familiar with (WORD and EXCEL -- which may have advantages if you’re starting from scratch because of the ease with which you can adjust the size of a cell). Finally, the Guide will most likely have an even number of pages -- unless you choose to leave a blank page or print information inside the cover (e.g., the Table of Contents). If you print 2 pages per sheet and double side and staple, the number of pages will be a multiple of 4. Keep that in mind when you are laying out the document.

While it’s a relatively expensive process to print a new Guide (copies of our Guide cost \$1.95 for an order of 640), there are cheaper mechanisms for updating the Guide as circumstances warrant. Peel-off labels can be used to update the Houston Zoo-specific animal information for a given species, or to insert a whole new species on one of the blank pages.

And in conclusion...

Docents at the Houston Zoo have been using the Help/Carrier Cards and Pocket Guide in their earliest versions since 1994 - 95. The Pocket Guide is now on it's 3rd revision and the cards have multiplied, been improved, and updated. These tools have worked well for our zoo docents. Even veteran docents benefit from having these facts "at their fingertips." Today we'd have to pry them out of docents' cold dead fingers before they'd give them up!

Of course all zoos and docents are different and special in their own way, so what we've done may or may not work well for you directly. We have learned a lot these past nine years and hope that some of this knowledge will help make your docent life easier, more fun, and more effective.



Giant Eland

Taurotragus derbianus gigas

General Information	Adult Height	6 feet (at shoulder)			Habitat	Broad leaved savannas and glades
	Length	7 - 9 ft				
	Weight	970 - 2000 lb				
	Birth Length	Up to 80 lb			Distribution	Senegal to Ivory Coast
	Life Span				Diet	Wild Predominantly browsers, leaves & fruits of trees, grasses & herbs
	Wild	15-20 years				
	Captive	20+ years				
	Gestation	9 months			Zoo	Oat and alfalfa hay and grains and browse for enrichment
	Nurse	3-6 months				
	Sexually Mature	F: 3 yr M: 3 yr but usually not till 6 due to social hierarchy				
HZI Specific Information	<u>Name</u>	<u>Born</u>	<u>Sex</u>	<u>Parents</u>	<u>Comments</u>	
	Houston	8/31/97	M	Captive born at White Oak Conservation Center	Largest of the 3	
	Austin	8/30/98	M		Most timid of the 3	
	Travis	8/20/99	M			

James Allen

3/03

GEE WHIZ FACTS

- Giant elands are the largest antelope species.
- Elands are extraordinary jumpers, leaping up to 8 feet from a near standing start
- Both sexes have long spiraling horns. Male horns can be up to 4 feet in length and form a wide "V" with considerable twist straight back.
- Despite their size they can be quite fast, running ~25mph.
- Herds containing up to 60 animals of both sexes have been reported, 15-25 is the usual herd size.
- Numbers in the wild have been greatly reduced by hunting for meat and hides and by rinderpest, a bovine disease.
- The Houston Zoo houses the central African giant eland. Currently there are only five other zoos in the United States that exhibit giant eland.

Biofact	How to use
	❖
Frequently asked questions (answers)	<p>Is there a social hierarchy? Dominance hierarchy that is usually based on size, strength and age does exist, they exhibit a pattern known as cross domination, e.g., X is dominant to Y, and Y is Z, but Z is dominant to X, except for the premium master bulls.</p> <p>Are they endangered? The western giant eland is endangered, as of 1997 and the Central African (the type the zoo has) is on the conservation list.</p>



General Information	Adult Height	10 - 11 in.	Habitat	Open wooded farmland, hedgerows & woodland edges
	Wingspan	19 1/2 - 22 in.		
	Weight	4.5 - 6.5 oz		
	Birth Length	Breeding starts April - May	Distribution	Southern Europe, Western Asia & North Africa
	Weight	Clutch - 2 eggs		
	Life Span		Diet	Wild
	Wild			Seeds & fruit
	Captive			Foraging is mostly on the ground
	Incubation	13 - 14 days	Zoo	Dove mix (seed & grain) and greens mix(kale, lettuce, spinach)
	Fledge	19 - 21 days		
HZI Specific Information	Name	Born/Acquired	Sex	Accession #
	Chloe	9/30/2001	M	19580

Vannevar Yu

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GEE WHIZ FACTS

- With a smaller head and longer neck, the Turtle Dove is more slender and more graceful than many pigeons.
- Unlike other birds, pigeons and doves do not sip when drinking, but instead they immerse their bill, sucking up water.
- All pigeon and dove species move about in flocks during the day and roost together at night.
- All pigeons in general follow similar courtship patterns. The males coo loudly, displaying before the females. At a more advanced stage of courtship the movements seem more like a bowing to the female. These displays sometimes go on for days, followed by nest building.
- Nests are placed in shrubs and trees, relatively low. Doves prefer areas with tall hedges and thickets to woodlands. The male chooses the nesting site and gathers twigs, roots and other materials, which are set in place by the female.
- These birds are monogamous and tend to mate for life. Male and female share incubating duties for about 2½ weeks after which the chicks are hatched nearly naked. These birds are "altricial," meaning the chicks are almost helpless after hatching and require attentive parental care and feeding. The young can fly when they are three weeks old.
- From 1970 the Turtle Dove population has plummeted by nearly 80% and is a species of high conservation concern (Red List). The cause of the decline is not known, but Turtle Doves are one of the species that are shot in large numbers in and around the Mediterranean Sea during their migration.

<u>Animal</u>	KOMODO Dragon 
Adult Weight – lb.	150 (M) 100 (F)
Adult Length – ft.	8 (average)
Life Span – Wild – yr. Captive – yr.	25
Incubation	240 – 280 days
Sexually mature – yr.	
Habitat	Tropical savanna forests, from beach to ridge tops
Distribution	Indonesian islands of Komodo, Rintja, Padar, Flores, Gili Mota, Owadi Sami
Diet – Wild Zoo	Carnivorous and cannibalistic; carrion-eaters Rodents (rats & mice) weekly
HZG Specific Information Name – Sex – DOB	M - 9/24/98 F - 10/3/98
<i>GEE WHIZ FACTS</i>	<ul style="list-style-type: none"> * World's largest lizard. * Solitary; together only to breed and sometimes to feed on carrion. * Diurnal (active in the day); good swimmer; good eyesight. * Hunts by ambush, seizes prey with jaws. Bacteria in the mouth infect prey when bitten. If prey gets away, death usually results by blood poisoning within 1 - 2 days.

ANIMAL HANDLING GUIDELINES

The five basic rules - S.H.A.R.P.

1. **SUPPORT** - give animal support where it normally has it - where legs attach, under the feet, etc.
2. **HEAD AWAY** - keep head away from public - animals can bite! Encourage guests to stroke the animal the way the hair, scales or feathers naturally grow.
3. **AWARENESS/KNOWLEDGE** - be familiar with natural history of the animal before taking it out - **use the Help Cards**. Be aware if animal has been handled recently. Be aware of the proximity of predator & prey species.
4. **RESTRAIN** - use just enough restraint to keep control - firm but gentle. If using one hand, keep the other hand near the animal as well.
5. **PLANE** – keep the animal on its natural plane - **not** upside down or vertical

Outdoor Temperature Restrictions

70°F	<u>Minimum</u> for birds, reptiles & tenrecs
70°F	<u>Maximum</u> for chinchillas
65 - 85°F	No restrictions
86 - 90°F	45 min. <u>Maximum</u>
91 - 95°F	15 min. <u>Maximum</u>
Above 95°F	<u>No Handling</u>

Other

- Keep audience, animals & yourself **SAFE!**
- Always stand or sit in front of some type of barrier and keep the public in front of you.
- Keep animal carrier close at all times.
- Remember: touch predator before prey.
- Give animals as much rest time as handling time.