

# You've come a Long Way, Vultures!

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In 1991, when the Jacksonville Zoo wrote to me asking about vultures in Indian Zoos, I wondered what they were about. At that time, vultures were not of much interest to zoo people, or even conservationists. At that time, only the Parsis were interested because their traditional means of disposing of the deceased was to place the corpse on the top of a tall platform near resident vultures that could see and smell and ultimately partake of the feast. I heard this first from Dr. Robert B. Grubb at BHNS who was even at that time a vulture specialist.

What I learned from him inspired me to make a deal with the Jacksonville Zoo which was that if I did a proper survey of Indian zoos with vultures, listing what species, breeding record, range heretofore unreported they would support the expense of that and also donate a healthy amount for making educational materials for zoos to use in public education. This seemed the most important action at the time since no one had a charitable attitude toward vultures, who, after all, did clean up the garbage and had to deserve some respect just for that.

I anticipated a difficult time both inspecting and gathering information as well as in designing educational material that would appeal to visitors. I was wrong ... zoo directors and staff were very pleased that someone was taking interest in their vultures. They also used the educational materials, conducting programmes with adults bringing children and reported a very good response. The visitors were fascinated to learn so many good things about these maligned hero-birds and the kids also. The press loved the educational material, printing some of it in their papers. The vulture education material was so well received, we use much of it today, particularly the graphics and poems. Regarding the poems, I can modestly report that I wrote all those poems before breakfast one morning, except for a recent one that wasn't included in the booklet. For the sake of Vulture Day I will include some of them in this issue of ZOOS' PRINT.

Education is crucial to conserving vultures. Today is very different because vultures underwent an enormous decline a few years ago from ingesting a drug (dicolgesic) that was in the corpses of livestock. Veterinarians used the drug to prevent disease in cattle but vultures were sensitive to it and died. Even in the days when I was approached by Jacksonville Zoo, however, some sharp-eyed naturalists reported decline. Part of my survey included a kazillion post cards sent to foresters, wildlife researchers and naturalists throughout India, asking simply "do you see as many vultures as you used to"? I got a great response to this with many people reporting "no" and giving details and no one reporting "yes".

Much has taken place since those days. Although vultures were already declining due to the normal threats associated with development and human greed, the drug dicolgesic was the proverbial straw that broke the camel's back. Governmental and Non-governmental organizations took notice and began to act, even going so far as to set up captive breeding centres!

So for this issue we would like to feature two initiatives to curtail vulture decline, e.g. the recent CZA article reporting the excellent symposium they conducted covering South Asia featuring vulture decline and also an educational initiative by the Birds of Prey Programme in South Africa and the Hawk Conservancy Trust in England. This was first celebrated on 5 September 2009 and will be celebrated on the first Saturday of every September heretofore. India is on board and also other South Asian countries and a number of countries around the world.

First we will introduce you to the vulture poems written before breakfast in 1991 which have been tweaked ever so slightly to improve them for you.



**Himalayan griffon vulture**

I grunt and hiss while I feed,  
Scaring competition as is my need.  
My size is huge and hence my greed  
in filling my stomach, ...  
a large task indeed!

My colour is pale with white below, and  
black contrasting feathers the better to show  
my bare buff head and shaggy ruff,  
with pinkish feet like a powder puff.

Mountains are my favourite venue  
as I track cattle to await them on the menu.  
Cliffs are where I rest and nest but  
breeding in mountains is what I do best.



**Black Vulture**

"Because I prefer southern Indian culture  
I am sometimes called a Pondicherry  
Vulture.

Despite my imposing size  
And dramatic coloration,  
I am too shy to be a threat,  
... except in your imagination

When you consider my glossy,  
large, black frame  
Topped off by my handsome,  
bright, red head

It seems to me the greatest shame  
To waste my charms on the dead."

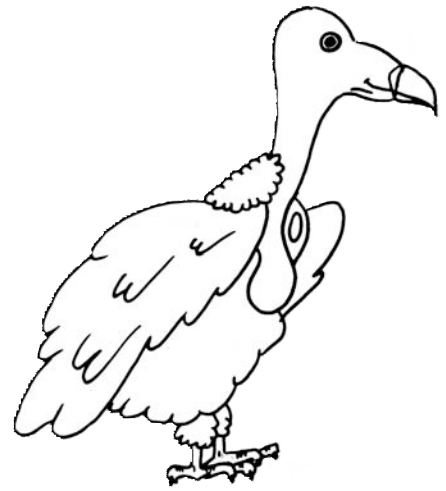


**Indian White-backed Vulture**

"Alas, I am one very ugly bird  
And for my social standing there is  
hardly a word

Dark grey on darker grey with a  
wispy white ruff  
On my thin, scrubby neck, life is very  
tough.

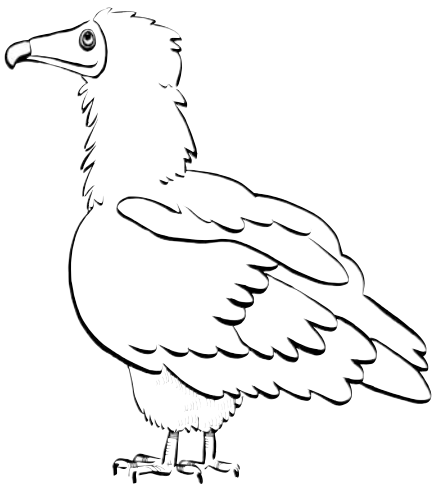
They call me (wrongly) the Bengal Vulture  
Because I was Scientifically named  
within that culture



**Indian long-billed Vulture**

I am a large brown, yellow-billed raptor  
Having more colour contrasts,  
your attention to capture!  
My wings are broad, head small,  
Neck long, tail short, appearance tall!

I live on ledges of cliffs and buildings also  
with my cousins and peers;  
my voice is quieter than some vultures  
in respect of your ears



**Egyptian Vulture's lament**

Have you heard of the  
famous white vulture?

The smallest scavenger in  
Afro-Asian culture

My claim to fame is using a tool  
to break eggs, throwing rocks on them  
as a rule.

However.... my nice colour and  
intellectual frequency  
does not compensate for my putrid palate,



**Bearded Vulture**

I am a large Asian Lammergeyer  
But please be assured you have  
nothing to fear.

Aside from being shy and having few vices  
I am also plagued by an indentity crisis!  
The zoologists, you see, who decide on  
what is legal Can't make up their minds if  
I'm a vulture or an eagle!



**Cinereous vulture**

I am the largest bird of prey in the world  
Thus my status is not less than an Earl!  
I am covered in colours of brown & black  
Which is great camouflage in point of  
fact. Himalayan Griffon Vulture is not in  
any way my kin, But our longish necks seem  
to come from the same bin!

You can see me alone or on a date  
with another Old World Vulture...  
it is our fate.

If you see me in the sky just heed my  
cautious words:

"I am one of the world's heaviest flying  
birds!"

(SPLAT! you don't want THAT!

# Regional Declaration on Conservation of Critically Endangered Vulture Spp. in South Asia, Central Zoo Authority

*On the eve of International Vulture Awareness Day we wish to feature the progress of India and other South Asian countries in saving vulture species from extinction, point by point. These points were extracted from the Central Zoo Authority Symposium on Developing Regional Responsibilities for CR South Asian Vulture published in the Ex Situ Updates, Quarterly Newsletter of the Central Zoo Authority, July 2012, Volume 1, Issue 2.*

Governments of Bangladesh, India, Nepal and Pakistan adopted a Regional Declaration on the Conservation of South Asia's Critically Endangered Vulture Species in Delhi on 4 May 2012, agreeing to take stringent measures to remove toxic, "vulture killing" drugs from the environment, including diclofenac, identified as the single most important cause for the catastrophic decline of vulture populations across South Asia.

The governments agreed to create transboundary "Vulture Safe Zones" to conserve vulture populations in the wild having recognised the need to scale-up conservation breeding and reintroduction programmes, and a South Asia Regional Steering Committee for Vulture Conservation has been established to coordinate and guide these measures.

## Regional Declaration on the Conservation of South Asia's Critically Endangered Vulture Species

- RECALLING that vultures are specialized scavengers that provide a critically important ecosystem service by removing carcasses of livestock and wild animals, and carrion from the environment;
- FURTHER RECALLING that vultures are an integral part of the cultures of South Asian countries, and play a central role in several of the region's ancient religious traditions;
- RECOGNIZING that South Asia's populations of long-billed vulture (*Gyps indicus*), slender-billed vulture (*Gyps tenuirostris*) and white-rumped vulture (*Gyps bengalensis*) have declined by more than 99 per cent since the early 1990s;
- NOTING that IUCN (International Union for Conservation of Nature) has listed all three species as Critically Endangered on the IUCN Red List;
- FURTHER NOTING that IUCN called for urgent measures to be taken to conserve these species, in Resolution 3.079 on the Conservation of Gyps Species of Vultures in South and Southeast Asia, adopted at the IUCN World Conservation Congress in Bangkok in 2004;
- RECALLING Aichi Biodiversity Target 12, which calls for all countries and stakeholders to prevent the extinction of known threatened species by 2020 and to improve the conservation status of those species most in decline;
- FURTHER NOTING that these rapid declines have been caused by human activities, in particular, the use of diclofenac (a non-steroidal anti-inflammatory drug) in the livestock sector
- COMMENDING the important steps that have already been taken by Governments, scientific bodies, non-governmental organisations, international organisations and the private sector, including:
  - The ban on veterinary • diclofenac in Bangladesh, India, Nepal and Pakistan;
  - The establishment of • conservation breeding centres in India, Nepal and Pakistan;
  - The initiation of "vulture safe • zones" together with safe vulture feeding sites in several countries;

- Promoting research and • monitoring of the vulture population;
- FURTHER COMMENDING the activities of SAVE (Saving Asia's Vultures from Extinction) and its members for their notable contributions to vulture conservation in the region;
- RECOGNIZING the need to intensify and significantly expand the aforesaid efforts in order to ensure the recovery of South Asia's wild vulture populations;
- ALSO RECOGNIZING that there is an important need for enhanced regional collaboration, information sharing, exchange of experiences and lessons learned on conservation of vultures in South Asia;

*We, the participants at the Symposium on Developing a Regional Response to the Conservation of South Asia's Critically Endangered Vulture Species, held in Delhi from 3-4 May 2012, hereby agree to:*

1. STRENGTHEN regional cooperation, by:
  - Establishing a South Asia • Regional Steering Committee for Vulture Conservation;
  - Taking active steps to • enhance information sharing and exchange of experience use of the non-steroidal anti-inflammatory drug diclofenac, ingested by vultures consuming carcasses of cattle that had recently been treated with the drug.
2. STRENGTHEN vulture conservation breeding and reintroductions by
  - Ensuring rapid dissemination of information relating to successful techniques and approaches amongst all centres in the region;
  - Seeking to maintain an increase the level of financial and technical support for conservation breeding received from Governments, international organizations and donors, so as to deliver the objectives for the annual production of captive-bred young;
  - Planning and implementing necessary measures required at release sites;
3. CREATE AND MAINTAIN a non-toxic environment for vultures by :
  - Removing diclofenac and other toxic NSAIDs completely from the vulture food chain, through measures including enhanced enforcement of the ban on veterinary use of diclofenac and eliminating its "leakage" from human use by urgent measures and legislation, as appropriate, against multi-dose vials of human diclofenac;
  - Identifying and preventing the • veterinary use of other non-steroidal anti-inflammatory drugs with similar toxicity to vultures as diclofenac, such as ketoprofen and aceclofenac (a pro-drug of diclofenac);
  - Continuing efforts to identify, • promote and adopt safe alternatives to diclofenac, such as meloxicam;
  - Monitoring and assessing the • impacts and effects of other livestock drugs on vultures, leading to active steps for preventing use of the drugs that have negative impact on vultures;
  - Fully enforcing the legal ban on • the manufacture of veterinary formulations, retail sale and use for veterinary purposes of diclofenac;
- 3 STRENGTHEN conservation measures by
  - Increasing the number, size and • effectiveness of national "vulture safe zones", within which special efforts are made to remove all toxic veterinary drugs from the food chain of vultures;

- Cooperating to create trans-boundary vulture safe zones, knowing that political borders don't stop vultures from crossing international borders while searching for food;
  - Enhancing the protection and management of vulture habitats and vulture roosting and nesting sites;
5. CONTINUE AND EXPAND strategically-designed awareness and advocacy campaigns, aimed at building support for vulture conservation amongst all stakeholders at local, national, regional and international levels;
6. STRENGTHEN monitoring and research, by:
- Continuing and expanding efforts to monitor vulture populations and breeding success on a regular and repeatable basis using road transect surveys and nest monitoring,
  - efforts to monitor and quantify diclofenac and other toxic drugs in cattle carcasses;
  - Determining the safety and toxicity of veterinary NSAIDs, if necessary by experiments on captive vultures;
  - Promoting studies on all possible causes of decline of wild vulture populations;
  - Promoting studies on vulture behaviour and ecology;
7. CONTINUE to develop and foster active partnerships amongst Governments, research institutions, civil society, private sector and international organisations to further accelerate vulture conservation in the region

## Vultures in Indian zoos and Other South Asian countries

### India

#### White-backed vulture (*Gyps bengalensis*)

Kamla Nehru Zoological Garden, Ahmedabad, Gujarat  
 Nehru Zoological Park, Hyderabad, Andhra Pradesh  
 Sakkarbaug Zoo, Junagadh, Gujarat  
 Dhauladhar Nature Park, Hamirpur, H.P.  
 Gandhi Zoological Park, Gwalior, M.P.  
 Manipur Zoological Garden, Imphal, Manipur  
 Arignar Anna Zoological Park, Chennai, T.N.  
 Ramnabagan Mini Zoo, Burdwan, W.B.  
 Sepahijala Zoological Park, Bishalgarh, Tripura

#### Slender-billed vulture (*Gyps tenuirostris*)

Vulture Conservation Breeding Centre, Pinjore, Haryana

#### Scavenger / Egyptian vulture (*Neophron percnopterus*)

Indira Gandhi Zoological Park, Visakhapatnam, Andhra Pradesh  
 Nehru Zoological Park, Hyderabad, Andhra Pradesh  
 Nandankanan Biological Park, Bhubaneswar, Odisha  
 Sakkarbaug Zoo, Junagadh, Gujarat

#### Long-billed vulture (*Gyps indicus*)

Rajiv Gandhi Zoological Park, Pune, Maharashtra  
 Sakkarbaug Zoo, Junagadh, Gujarat  
 Lady Hydari Park Animal Land (Meghalaya Zoo), Shillong, Meghalaya  
 Udaipur Zoo, Udaipur, Rajasthan

#### Himalayan giffon vulture (*Gyps fulvus*)

Biological Park, Itanagar, Arunachal Pradesh  
 Assam State Zoo Cum Botanical Garden, Guwahati, Assam  
 Vulture Conservation Breeding Centre, Pinjore, Haryana  
 Aizwal Zoo, Aizwal, Mizoram  
 Kanpur Zoological Park, Kanpur, U.P.

#### Black/Cinereous vulture (*Aegypius monachus*)

Rajiv Gandhi Zoological Park, Pune, Maharashtra  
 Assam State Zoo Cum Botanical Garden, Guwahati, Assam  
 Jammu Zoo, Ramnagar, J & K  
 Sri Chamarajendra Zoological Gardens, Mysore, Karnataka  
 Thiruvananthapuram Zoo, Thiruvananthapuram, Kerala

#### Asian King / Red-headed vulture (*Sarcogyps calvus*)

Nehru Zoological Park, Hyderabad, Andhra Pradesh  
 Thiruvananthapuram Zoo, Thiruvananthapuram, Kerala  
 Kanpur Zoological Park, Kanpur, U.P.

#### Vulture (Unidentified)

National Zoological Park, Delhi  
 Kamla Nehru Zoological Garden, Ahmedabad, Gujarat  
 Sanjay Gandhi National Park and Zoo, Maharashtra  
 Jhargram Zoo, West Bengal

#### Other Vulture Conservation Breeding Centres in India

Raju Bhat Khawa (Buxa Tiger Reserve), West Bengal  
 Rani Forest in Assam

### South Asian countries

#### Bangladesh

Dhaka Zoo  
 Chittagong Zoo  
 Rangpur Zoo

#### Nepal

Central Zoo, Nepal  
 Vulture Conservation Breeding Centre, Kasara, Chitwan  
 National Park, Nepal

#### Pakistan

Lahore Zoo  
 Gyps Vulture Restoration Project, Changa Manga, Punjab Province,  
 Pakistan run by WWF-Pakistan.



## INTERNATIONAL VULTURE AWARENESS DAY, 1<sup>st</sup> September 2012

First Celebrated on 5th September 2009, i.e. first Saturday of every September the International Vulture Awareness Day, or IVAD, was started by the Birds of Prey Programme in South Africa and the Hawk Conservancy Trust in England. The aim is to initiate a synchronized international day that would broadcast the conservation of vultures to a wider audience and emphasize the imperative work being carried out by the world's vulture conservationists.

On September 1st 2012, the aim is for each participating organisation to carry out their own activities that highlight vulture conservation and awareness. The website ([www.ivad09.org](http://www.ivad09.org)) was established in July 2009 to provide a central place for all participants to outline these activities and see the extent of vulture conservation across the world.

Vultures have come into consideration due to an unexpected and sharp decline in their population. They act as the sanitation department of the natural world. The services rendered by these scavengers have an impact on health, economy as well as environment. Vultures are very perceptive to the environmental changes as they have long life spans, low breeding rate, have large selective diet and are at the top of the food chain. Therefore, they are excellent marker of the state of health of ecosystems. The Indian Government as well as NGOs and Conservationists are taking the initiatives to conserve these spectacular scavengers through in-situ and ex-situ conservation. Awareness Programmes play a vital role in the conservation of all flora and fauna.

Some Organizations Participating in 2012:  
Arulagam, India; Audubon Society of Portland, United States; Axxhfv, Panama; Banham Zoo, United Kingdom; Beamish Wild, United Kingdom; Bird Conservation Nepal, Nepal; Bird Conservation Society Gujarat Vulture cell, India; Birds of Prey Protection Fondation, Serbia; Channing.info, France; Cheyenne Mountain Zoo, United States; Disney's Animal Kingdom, United States; Eagle Heights, United Kingdom; Faszination Geier / Fascinated by Vultures, Germany; Hawk Conservancy Trust, United Kingdom; Khandesh Nature Conservation Society, Jalgaon, Maharashtra, India; Lewis Phillips images, United Kingdom; Nyoka Vulture Restaurant, South Africa; reelism films, India; Save the Vulture Save the Ecosystem, India; St. Augustine Alligator Farm, United States; Tampa's Lowry Park Zoo, United States; Thar Desert ecological society (SOS-Save Vulture Community), India; The Corbett Foundation, India; The Mother Africa Trust, Zimbabwe; Toronto Zoo, Canada; Tunisia Wildlife Conservation Society TWCS, Tunisia; University of Lucknow, India; Vultures Namibia, Namibia Vultures Rock, United States; Wildlife and Environment Society of South Africa; Wildlife Prairie State Park, United States; World of Wings, United Kingdom; [www.savevultures.org](http://www.savevultures.org), India; Xwsutzqz, Guyana; Zoo Atlanta, United States and many more have signed on since this list.

International Vulture Awareness Day was celebrated and some further awareness programmes run in 2009-2011 by the Wildlife Conservation and Environmental Biology Lab, Zoology Department, University of Lucknow by Dr Amita Kanaujia & Ms. Sonika Kushwahq. Dr. Amita Kanaujia is Associate Professor in Department of Zoology, University of Lucknow, Lucknow. She is one of the members of State Vulture Conservation Society, Department of Forest Uttar Pradesh as well as Principal Investigator of a Project entitled as "Monitoring Of Roosting And Breeding Sites Of Vultures In Jhansi, Latitpur, Jalaun And Mahoba" funded by U.P. State Biodiversity Board.

Ms.Sonika Kushwaha is a Research Scholar in Department of Zoology, University of Lucknow, Lucknow. She is working as a JRA in a Project entitled as "Monitoring Of Roosting And Breeding Sites Of Vultures In Jhansi, Latitpur, Jalaun And Mahoba" funded by U.P. State Biodiversity Board. Email: [kanaujia.amita@gmail.com](mailto:kanaujia.amita@gmail.com) and [sonika2107@gmail.com](mailto:sonika2107@gmail.com). The following picture illustrate some of their work.



Rangoli by participant

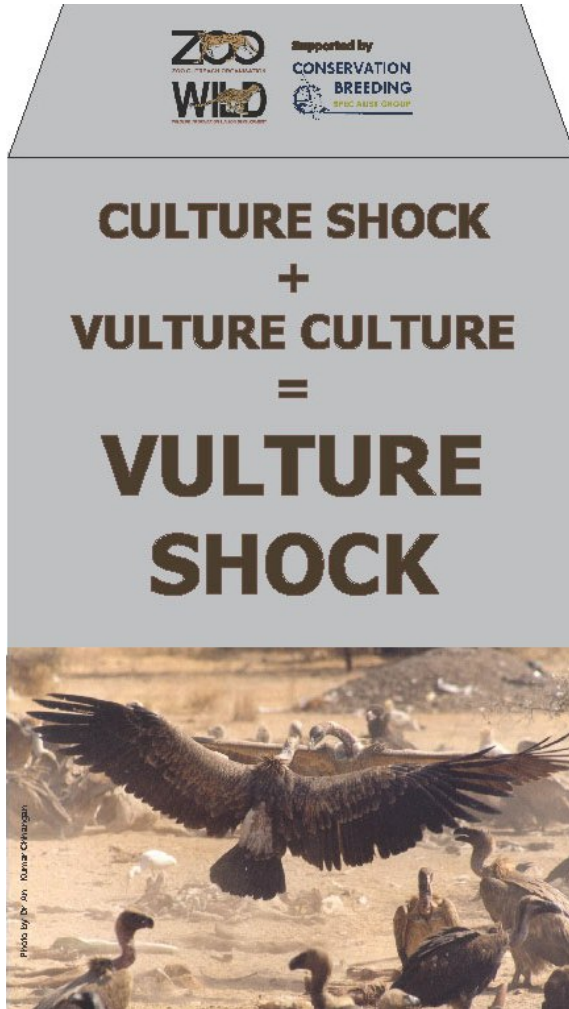


Clay modeling by participant

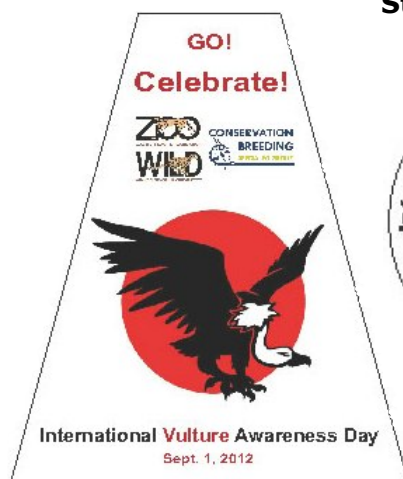


Vulture painting

# Some Zoo Outreach Organisation items available for International Vulture Awareness Day, 2012



Sticker



Placard



Rakhi



Booklet

# Some IVAD Designs to make celebrating International Vulture Awareness a great success



Buttons for Vulture Day



Lappet-faced Vulture  
Color anyway you want to.  
Cut out eyes and mouth by following the dotted lines.  
Add string to the side of the mask, marked by lines as well.  
Enjoy being a Vulture!

Vulture Mask

## Vulture flyers

### WANT TO LEARN ABOUT VULTURES?



- Vultures have been revered by cultures around the world for centuries. They are thought to be messengers of the gods.
- Vultures control diseases in humans and livestock. Their strong stomach juices can even kill anthrax and cholera!
- They can eat 1kg of meat in just 3 minutes. That's like you eating 5 hamburgers!
- After feeding, vultures will bump into each other to speed up their metabolism.
- Vultures are known as "Nature's Recyclers" since they consume carcases.
- A group of vultures catching thermal updrafts is called a "kettle" since they take on the appearance of water boiling.
- Vultures sometimes may fly for 200 miles in a day searching for food. And they may soar for hours without flapping their wings.
- If a vulture is harassed or frightened, it will attack on its would-be attacker. This will often cause the attacker to leave and will make the vulture lighter so it can fly away quickly.

## Vulture Worksheet



### "Vultures are Scavengers" Hunt

Walk around the Zoo and look for the red vulture signs to find the answers to the following questions.  
Answer as many questions as you can to win a chance to be in our Wings of Africa Bird Show and feed our vultures!

- 1) How many species of vultures are there in the world?
- 2) Name 2 reasons vultures have bald heads.
- 3) What are groups of flying vultures called?
- 4) What is the name of the drug that killed many vultures in Asia?
- 5) Name 2 other threats vultures face in the wild.
- 6) T or F: Turkey vultures can sing.
- 7) What does the word "condor" mean?
- 8) Why do vultures vomit? (list 2 reasons)
- 9) T or F: Cape vultures have a good sense of smell.
- 10) How long can a vulture go without eating?
- 11) Why do vultures urinate on their legs? (list 2 reasons)
- 12) T or F: Vultures are very clean birds.
- 13) T or F: Today's heaviest flying bird is a vulture.
- 14) Which species of vulture is the fast-eating champion?
- 15) Why are vultures known as Nature's Recyclers?
- 16) Why can vultures eat decaying meat and not get sick?
- 17) What species of vulture do we have in Colorado?
- 18) What species do we have at the Zoo?
- 19) Why are vultures important?
- 20) What can you do to help save vultures?

**The World is Full of SCAVENGERS!**

Scavengers are the cleanup crew who find and eat carrion (dead animals) in order to survive. Every day, animals are born and animals die. Without scavengers, the bodies of dead animals would rot away slowly and would smell! The decaying flesh would also pollute the water we drink and would attract flies and other disease-carrying insects and other animals. Fortunately, scavengers everywhere eat dead and dying animals before they have time to rot and make us sick.

**In nearly every habitat, this group of scavengers includes vultures!**

