

Bird Conservation Society of Gujarat

# Food of Birds

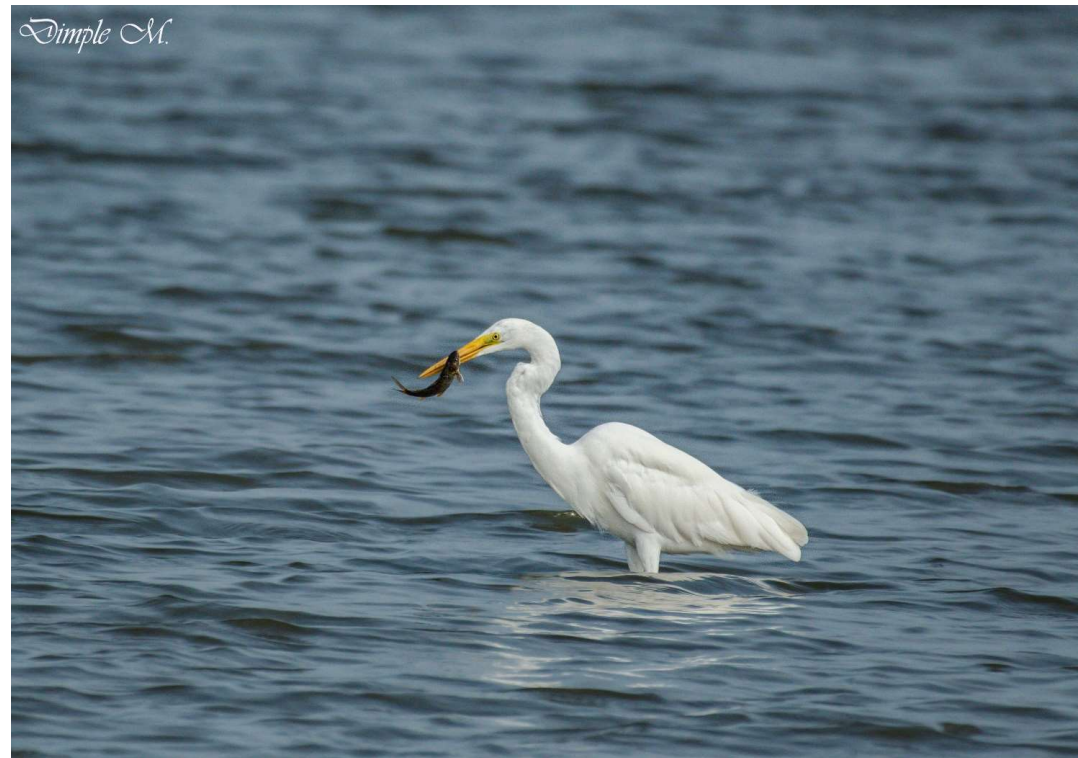


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# Food items of Birds

- Insects
- Seeds
- Fish
- Fruits
- Meat
- Aquatic invertebrates
- Nectar
- Honey
- Plants
- Crustaceans

















## How much do birds eat ??

- **Size:** In general, the smaller and lighter a bird, the more it will eat in proportion to its body weight. Hummingbirds eat twice the body weight in a day. Raptors eat  $\frac{1}{4}$  body weight in a day.
- **Season:** More feeding in cold weather to maintain body heat
- **Journey:** More feeding just before long distance migration





# How do young birds learn to find their food

- Instinct
- Observing parents
- Offcourse, trail and error



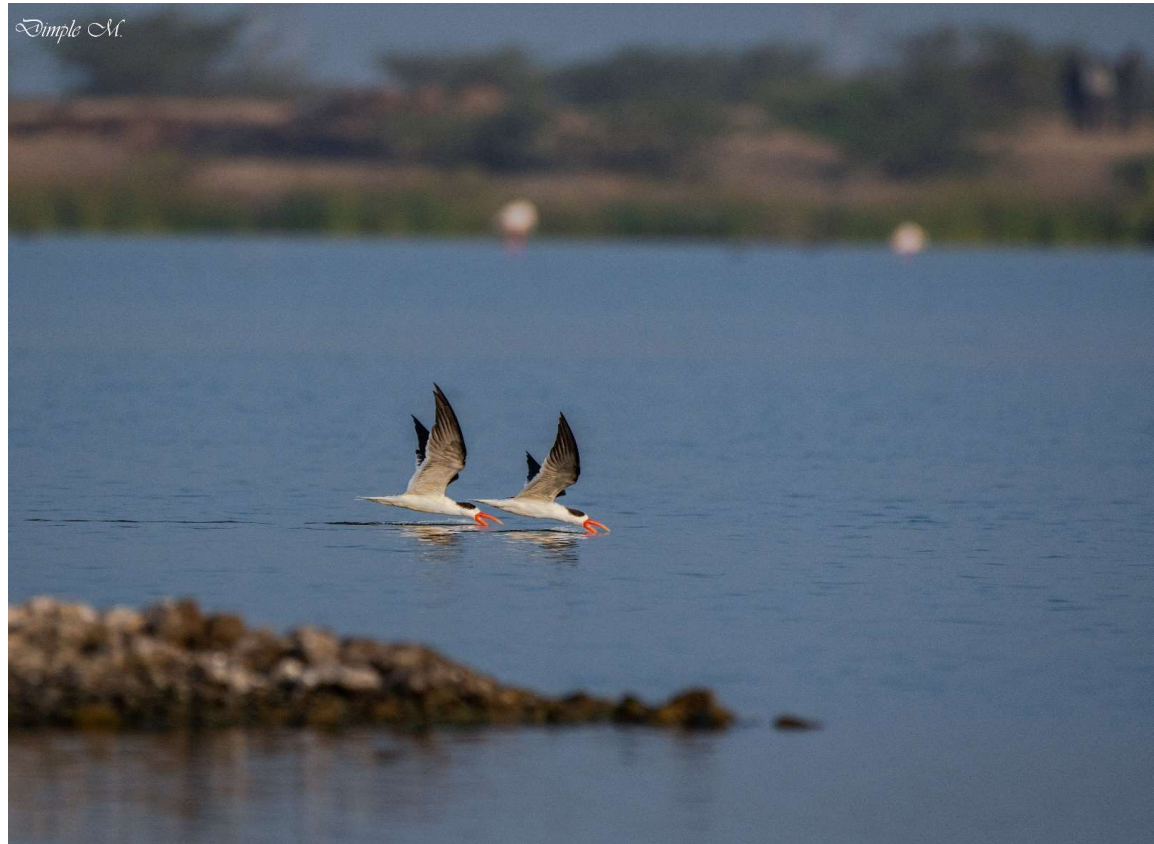
# Why don't birds eat leaves ??

- Absence of digestive enzymes for that
- Low calories so a huge amount must be consumed, it would seriously affect their flying ability



# Where do birds find their food ??

- Ground
- Tree
- Sky
- Water





# Senses of birds to find their food

- Mainly eyesight in most of birds
- Smell e.g. Turkey Vulture
- Touch e.g. Waders using sensitive nerve endings at tip of bill
- Hearing e.g. Owls

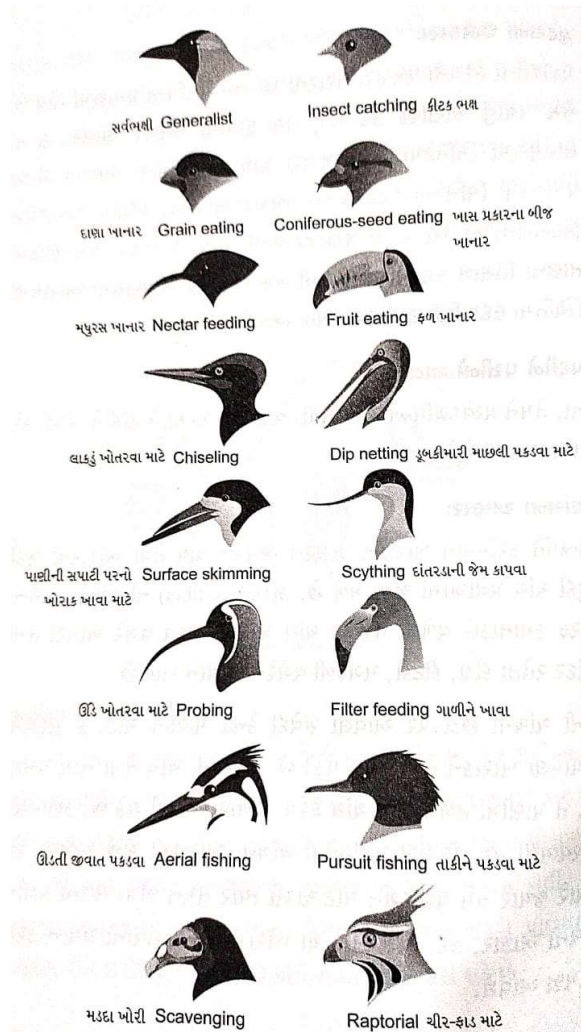


## Do birds chew their food ??

- No they cant as they lack teeth (It would make them too heavy to fly)
- Mostly they swallow their food as whole
- Seed eating birds like swallows, finches will normally crush a seed and discard the shell and husk before swallowing
- Raptors tear into chunks and strips to make feeding easy



# Various bill shapes for particular food item

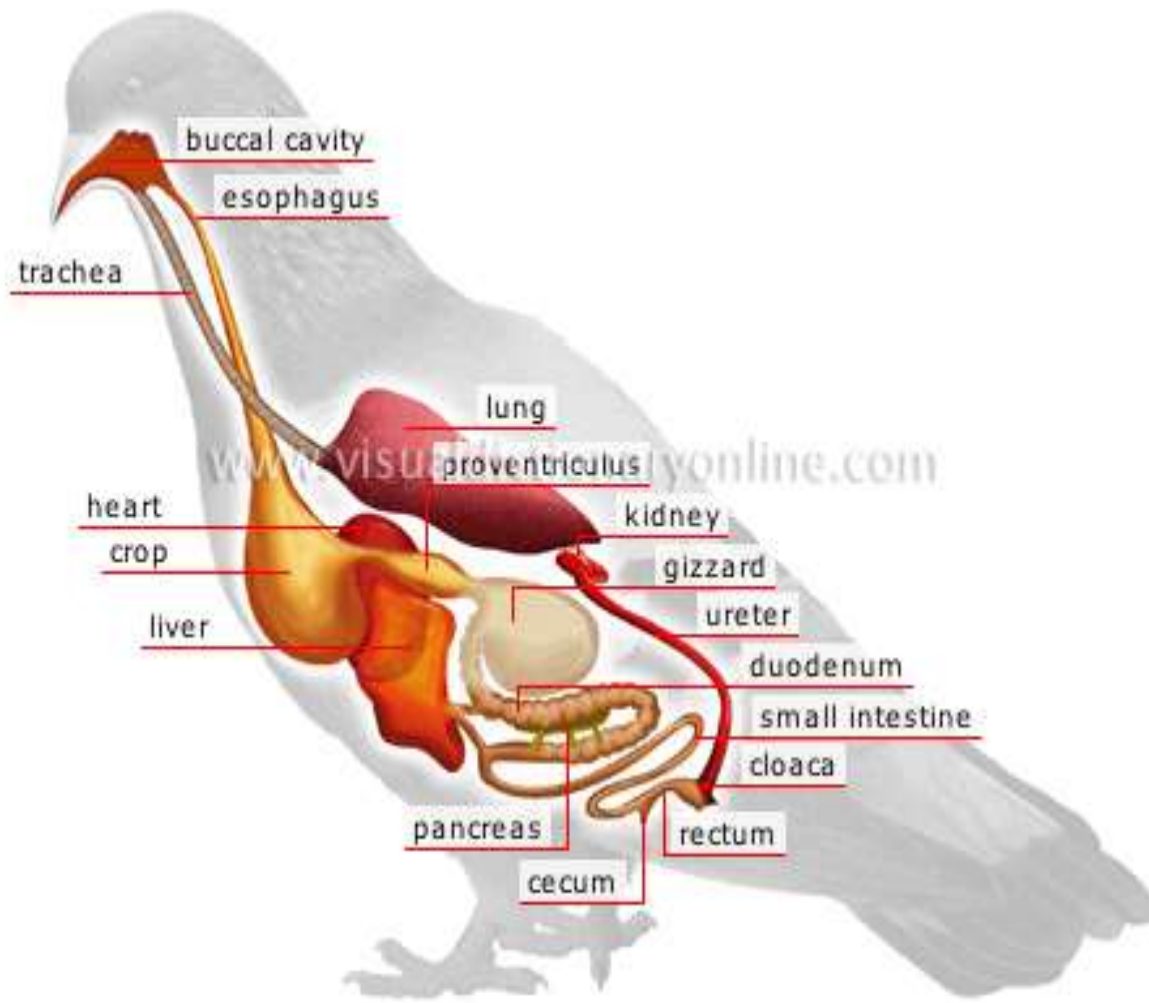




# How do birds digest their food ??

- By digestive juices of stomach
- Food can be temporarily stored at crop, a part of esophagus in pigeons and doves. It allows them to store items for later consumption or to regurgitate it to feed chicks in nest
- Gizzard in stomach helps in grinding the food doing same job as teeth
- Some items like fur, bones which can not be digested are regurgitated as a pellet





## Do birds hide or store food ??

- Nutcrackers and Jays. They bury their food and are able to find after several months
- Acorn woodpecker makes holes in tree trunks to store fruits of oak tree for future use
- Shrikes (Butcher birds) store their prey on spike of thorn bushes

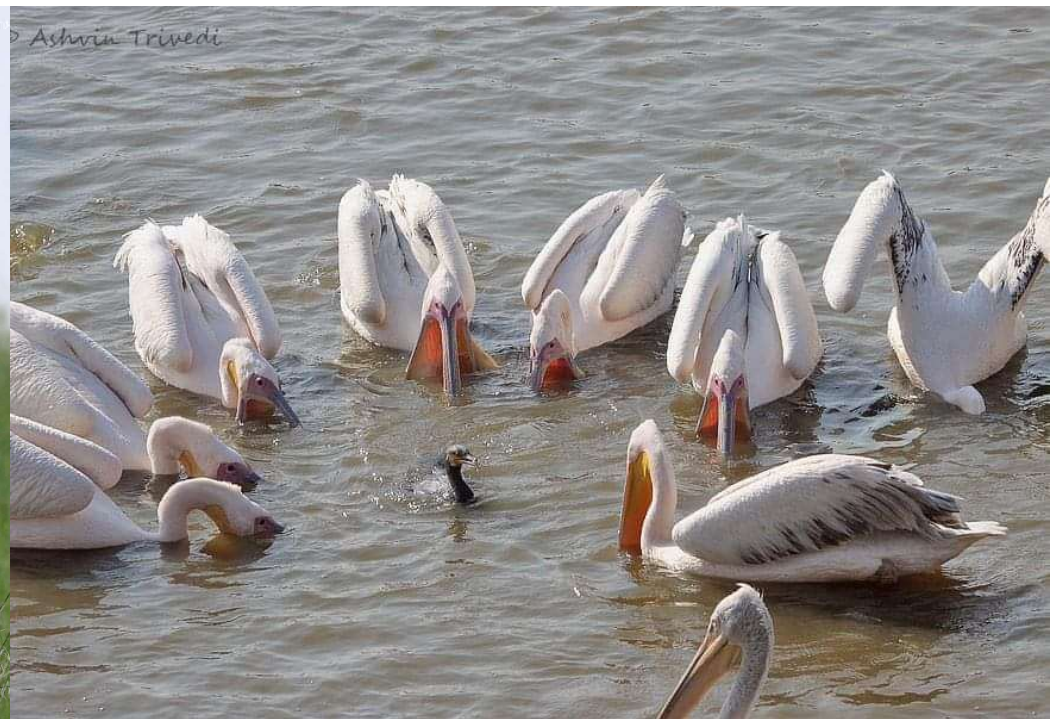




# Courtship Feeding



# Use of other animals to find food



## Steal food from others

- Known as kleptoparasitism
- Skuas and Frigate birds
- Some raptors
  
- True parasitism: very rare in birds. E.g. Vampire finch found in Galapagos takes blood from Masked and Red footed Boobies





# Scavenger

- Any species that feed primarily on dead meat
- e.g. Vultures
- Have bare, unfeathered head to prevent the clogging of feathers in blood and gore
- Due to their powerful digestive enzymes, they will never get food poisoning like humans



## How do birds drink ?

- Most of the birds lack ability to swallow. So they have to tip their head back to allow water down their throat
- Pigeons and doves can drink without lifting their head using tongue to create suction
- Some birds like martins and swallow fly low over water dipping their bill below water surface
- Penguins in antarctic get water by eating snow.



# From where to find water?

- Wetlands like lakes, ponds, rivers etc
- Dew
- Rainwater from leaves
- From food e.g. Insects
- Snow



## How often birds drink?

- Variable
- Depends on diet
- Insect eating birds drink less
- Birds eating seeds or other dry food have to drink more
- If enough liquid available in food, no need to drink at all
- More drinking in summer months





## How to carry water in nest?

- Mostly in bill which can be passed drop by drop in mouth of nestlings
- Sandgrouse soaks its sponge like breast feathers in water so that young ones can suck it



# Can birds drink saltwater?

- No, most of the birds cant
- However few seabirds like shearwaters, petrels have specially adapted salt glands in their nasal region which enables them to excrete high levels of salt found in sea water



# Acknowledgements

- [www.clipart-library.com](http://www.clipart-library.com)
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