

Ornithology Test SSSS Answer Key

Station 1 (13 points)

1. Greater roadrunner *Geococcyx californianus* (2 points)
2. Adult (1 point)
3. They are in the breeding season (2 points)
4. Four toes on each zygodactyl foot; two face forward, and two face backward (2 points)
5. Up to 32 km/h or 20 mph (1 point)
6. The pair chooses a nest site **3–10 feet or more off the ground**, on a horizontal branch or in the crotch of a **sturdy bush, cactus, or small tree**. (2 points)
7. They **secrete a solution of highly concentrated salt through a gland just in front of each eye**, which uses less water than excreting it via their kidneys and urinary tract. **Moisture-rich prey** including mammals and reptiles supply them otherwise-scarce water in their diet. Both **chicks and adults flutter** the unfeathered area **beneath the chin** (gular fluttering) **to dissipate heat**. (3 points)

Station 2 (12 points)

1. Phainopepla *Phainopepla nitens* (2 points)
2. Female (1 point)
3. "Phainopepla" comes from the Greek for "shining robe," (2 points)
4. The **bird mainly eats the berries** of the plant, and the **seeds are dispersed** and able to parasitize other plants when the seed is dropped onto them (2 points)
5. In the **desert**, it is **territorial**, actively defending nesting and foraging sites, while in the **woodlands** it is **colonial**, with as many as four nesting pairs sharing one large tree. (4 points)
6. True (1 point)

Station 3 (11 points)

1. California Condor *Gymnogyps californianus* (2 points)
2. 463 Critically endangered (2 points)
 - a. They were at **27 birds** in April of 1987
3. 1-2 weeks 3 pounds (2 points)
4. Up to 60 years (+/- 5 years) (1 point)
5. False (1 point)
6. In cold weather, condors **raise their neck feathers to keep warm**. In hot weather, condors **urinate onto a leg** which evaporates and cools the circulating blood. This is called **urohidrosis**. (3 points)

Station 4 (11 points)

1. Whip-poor-will *Antrostomus vociferus* (2 points)
2. They are named after their call (1 point)
3. They lay their eggs such that they **hatch around 10 days before a full moon**. **When the moon is near full, the adults can forage the entire night** and capture large quantities of insects to **feed to their nestlings**. (3 points)
4. True (1 point)
5. **Decreased** forest disturbance and **early successional forest habitat**, **pesticides** and intensified agriculture, both of which have led to **heavy declines in the flying insect populations** which is their main food source. **Habitat loss**. (3 points)
6. True (1 point)

Station 5 (11 points)

1. American Woodcock Scolopax minor (2 points)
2. The American Woodcock **probes the soil with its bill** to search for earthworms, using its **flexible bill tip to capture prey**. It will **step heavily with its front foot** to cause the worms to move around in the soil and be **easier to detect**. (4 points)
3. At dawn and dusk (2 points)
 - a. Crepuscular (1 point)
4. A, c, d (2 points - all or nothing)

Station 6 (11 points)

1. Cinnamon teal Spatula cyanoptera (2 points)
2. Male (1 point)
3. These birds feed by **dabbling**. They **mainly eat plants**; their diet **may include molluscs and aquatic insects**. (3 points)
4. **Freshwater wetlands**. Most of their preferred habitats include emergent **vegetation**, and they are most abundant on large, **permanent marshes**. (3 points)
5. The female **signals interest in a male by swimming in front of him**, and she **rejects a male by head-pumping or opening the bill**. (2 points)

Station 7 (8 points)

1. Scissor-tailed flycatcher Tyrannus forficatus (2 points)
2. The pair both hop around and test out different spots by pressing themselves against the branches. (3 points)
3. 3-6 eggs (1 point)
4. A, b and c (2 points - all or nothing)

Station 8 (11 points)

1. Evening Grosbeak Coccythraustes vespertinus (2 points)
2. Male (1 point)
3. To crush and eat large seeds (1 point)
4. Spruce budworm (2 points)
5. A and d (2 points)
6. Salmonella, West Nile virus, and House Finch eye disease (1 point per disease, up to 3 points)

Station 9 (11 points)

1. Magnificent frigatebird Fregata magnificens (2 points)
2. Juvenile (1 point)
3. False (1 point)
4. It **harasses other birds** until they **regurgitate recently captured food which** the frigatebird **snatches in midair**. (3 points)
 - a. Young frigatebirds **hold sticks in their mouths and chase each other**. When one of them **drops the stick, the other dives below** to retrieve it. (2 points)
5. 150-185 days (1 point)
 - a. 1 year (1 point)

Station 10 (12 points)

1. Barred Owl Strix varia (2 points)
2. True (1 point)
3. Great horned owl (1 point)

4. The pleistocene, around 11,000 years ago (2 points)
5. Barred Owls live year-round in mixed forests of **large trees**, often **near water**. They tend to occur in large, unfragmented blocks of **mature forest**. (3 points)
6. Small animals, including squirrels, chipmunks, mice, voles, rabbits, birds (up to the size of grouse), amphibians, reptiles, and invertebrates (up to 3 points)

Station 11 (10 points)

1. American Avocet *Recurvirostra americana* (2 points)
2. To keep the eggs from overheating during incubation, they dip their belly feathers in water. (2 points)
3. After 24 hours (1 point)
4. the American Avocet **gives a series of call notes** that **gradually rise in pitch**, simulating the Doppler effect and **making its approach seem faster** than it actually is. (3 points)
5. True (1 point)
 - a. Brood parasitism (1 point)

Station 12 (11 points)

1. Ruffed Grouse *Bonasa umbellus* (2 points)
2. They have **paired pouches** at the **junction of the small and large intestines** where they can store/put extra food. (2 points)
3. Their **toes grow projections off their sides** in winter, making them look like combs, which act as snow shoes and let them walk on top of the snow. (3 points)
4. Ring-necked Pheasants or Wild Turkeys (2 points)
5. A and b (2 points - all or nothing)

Station 13 (11 points)

1. Laughing gull *Leucophaeus atricilla* (2 points)
2. It is not breeding. It is in its second winter. (2 points, one per answer)
3. If the shells are not removed, a **piece can become lodged on top** of an **unhatched** egg and **prevent it from hatching**. (2 points)
4. They eat many invertebrates, including earthworms, insects, snails, crabs, and crab eggs, as well as fish, squid, etc (Up to 3 points based on how in depth)
5. For their **eggs** and for **plumes for the hat trade**. (2 points, one per answer)

Station 14 (11 points)

1. Mountain Chickadee *Poecile gambeli* (2 points)
2. Inside the cavity the female makes a **neat cup from fur** she gathers. She also makes a **fur plug or cap** that she uses to cover her eggs when she leaves the cavity. (2 points)
3. They **sunbathe** on an exposed perch **out of the wind**. (2 points)
4. **Protein-rich insects and spiders** during **warm months**, supplementing them with seeds and nuts as available. In **fall and winter**, **seeds of montane pine** species are mostly eaten. (4 points)
5. 7.5 million (+/- 1 million) (1 point)

Station 15 (9 points)

1. Louisiana Waterthrush *Parkesia motacilla* (2 points)
2. The specific name of Louisiana Waterthrush, **motacilla**, means **"tail-wagger."** They **dip (or teeter) the entire rear of the body** by moving their ankle joints **to help during hunting**. (3 points)
3. 2-6 eggs (1 point)

- a. 1 brood (1 point)
- 4. They feed on benthic invertebrates (2 points)

Station 16 (11 points)

- 1. Peregrine Falcon *Falco peregrinus* (2 points)
- 2. Juvenile (1 point)
- 3. 242 mph (1 point)
- 4. It can be found **nearly everywhere on Earth**, except **extreme polar regions, very high mountains**, and most **tropical rainforests**; the only major ice-free landmass from which it is **entirely absent is New Zealand**. (4 points)
- 5. DDT poisoning (1 point)
 - a. August 25, 1999 (2 points - partial credit for correct month and year but wrong day)

Station 17 (10 points)

- 1. Northern Fulmar *Fulmarus glacialis* (2 points)
- 2. Mean adult life span of about 32 years, But have been seen to live longer than 50. (2 points)
- 3. Fish, squid, zooplankton, offal from fishing and whaling vessels, and other animal matter found at sea (up to 3 points)
- 4. 10 feet (1 point)
- 5. Subarctic regions of the **North Atlantic** and **North Pacific** oceans. (2 points)