# **TOPIC 10 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | As the reptiles evolved the amniote egg, plants evolved ------ as an adaptation to the changing environment. | seeds |
| **A** | About ------ species of the order crocodylia occur in the world today. | 22 |
| **A** | A reduced plastron to the shape of a cross is characteristic of the ------. | snapping turtle |
| **I** | Is an important region in central Florida for several specialized species such as the sand skink and other species of lizards. | Lake Wales Ridge |
| **M** | Most lizards feed on ------ although there are exceptions to this pattern. | insects |
| **O** | Of the fossil reptile groups ultimately went extinct and left no descendants. | 2 |
| **P** | Perhaps the main reason the reptiles were able to dominate the Mesozoic was that they were ------. | not dependent on water for reproduction |
| **R** | Researchers from ------ found that, like the amphibians, populations of many species of reptiles were declining. | Savanna River Ecology Lab |
| **S** | Sea turtles have declined, in part, because they are killed ------. | for food |
| **S** | Snakes generally evolved to feed on ------ although there are a few exceptions to this pattern. | vertebrates |
| **S** | Sea turtles typically nest only on beaches ------. | where they were hatched |
| **T** | The sand skink of central Florida is characterized by having ------. | vestigial legs |
| **T** | The evolution of ------ in reptiles is seen as an adaptation for survival in a dry climate. | epidermal scales |
| **T** | The indigo snake is an example of a species that uses the ------ foraging mode. | seize and swallow |
| **T** | The fossil subgroups of reptiles are identifiable by their ------. | skull opening pattern |
| **T** | The fossil reptiles diversified into ------ subclasses. | 6 |
| **T** | The ------ is an example of a rear-fanged snake. | Brown Tree Snake |
| **T** | The ------ is an example of an herbivorous lizard. | iguana |
| **T** | The ------ is the extra-embryonic membrane that collects embryonic wastes. | allantois |
| **T** | The ------ is the largest living turtle. | leatherback |
| **T** | TSD is seen most commonly in sea turtles and ------. | crocodilians |
| **T** | The ------ is a species of lizard that is harvested commercially in South America for its skin. | tegu |
| **T** | There are roughly ------ species of turtles in the world today. | 350 |
| **T** | The Gopher Tortoise is classified in Florida by the FWC as ------. | SSC |
| **T** | The Euryapsid groups of fossil reptiles lived in ------ environments. | marine |
| **T** | The dorsal part of a turtle's shell is called the ------. | carapace |
| **T** | The ------ is a hard shelled sea turtle that feeds chiefly on sea grass and macro algae. | green turtle |
| **W** | Was a professor in the UF zoology department who was a pioneer in biological studies of sea turtles. | Archie Carr |

# **TOPIC 11 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | Archaeopteryx fossils date back to the ------ period in Bavaria. | Jurassic |
| **A** | All birds are oviparous. | TRUE |
| **A** | Are the most primitive flying birds. | Tinamous |
| **A** | A facial disc is a characteristic of the ------. | owls |
| **A** | A conical shaped beak, as seen in finches, is an adaptation for feeding on ------. | seeds |
| **A** | Are ratite birds that still exist today in New Zealand. | Kiwis |
| **C** | Carinate birds have a ------ sternum. | keeled |
| **D** | Dentition refers to the condition where the teeth are set in a groove in the jaw. | pleurodont |
| **D** | Dentition refers to the condition where the teeth are set on top of the jaw. | Acrodont |
| **E** | Elephant birds and Moas filled the niche of ------ on certain oceanic islands. | grazing mammals |
| **R** | Ratite birds all occur in the ------ hemisphere. | southern |
| **S** | Swallow their prey whole and then regurgitate the skins and bones in pellets. | Owls |
| **S** | Scientists believe that Archaeopteryx was a bird because it had ------. | feathers |
| **S** | Since the 1930s wading bird ------ have declined by 95% in Everglades National Park. | nesting attempts |
| **T** | The birds are thought to have evolved from the same reptilian subclass as the ------. | crocodilians |
| **T** | There are about ------ species of passeriform birds | 5100 |
| **T** | The flightless ------ of the Mascarene Islands were related to the modern pigeons and doves. | Dodos |
| **T** | The ------ builds a cup nest in cavities in trees. | Eastern Bluebird |
| **T** | The Wading Birds in Florida have suffered from ------ in south Florida. | all of these |
| **T** | The ------ is the flightless parrot. | Kakapo |
| **T** | The state of Florida lists the ------ as being threatened but the USFWS lists it as endangered | Red-cockaded Woodpecker |
| **T** | There are ------ bird species officially listed as endangered by the state of Florida. | 8 |
| **T** | The ------ are game birds found on islands in the south Pacific and in Australia whose young hatch ready to fly. | Megapodes |
| **T** | The ------ is a wading bird that occurs in Florida that feeds on freshwater mollusks. | Limpkin |
| **T** | The order Gruiformes is represented by several species of flightless ------ on oceanic islands. | rails |
| **T** | The tail vertebrae in modern birds are fused to form a structure called the ------. | pygostyle |
| **T** | The so-called Snail Kite feeds almost exclusively on ------. | apple snails |
| **T** | The Limpkin is listed as a(n) ------ species by the state of Florida. | SSC |
| **T** | There are roughly ------ orders of non-passeriform birds | 20 |
| **T** | The Ivory-billed Woodpecker and Bachman's Warbler are both ------. | probably extinct |
| **T** | The biggest threat to the Florida Grasshopper Sparrow is ------. | habitat loss |
| **T** | The Kakapo is native to ------. | New Zealand |
| **T** | The Fairy Tern lays its eggs ------. | on a naked tree branch |
| **W** | Woodpeckers build a cup nest in a tree cavity excavated by Bluebirds. | FALSE |
| **W** | Wood storks find food by using their sense of ------. | touch |
| **W** | When open habitats in South Florida near Lake Okeechobee are protected from fire ------ are able to invade and render the habitat unsuitable for Florida Grasshopper Sparrows. | hardwoods |
| **W** | Webbed feet and a depressed bill are characteristics of the order ------. | Anseriformes |

# **TOPIC 12 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | A large spur with a venom gland is found on the hind leg of male ------- | platypuses |
| **A** | A company from New England released Rhesus Macaques onto Key Lois and Raccoon Key in order to ------- | produce a population for biomedical studies |
| **A** | All mammals have ------ jaw articulation | dentary-squamosal |
| **A** | A fossil Monotreme was recently found in ------ | Argentina |
| **E** | Ever-growing incisors are characteristic of the ------- | rodents |
| **I** | In 1944, 29 ------ were released onto St Matthew Islands and 20 years later they had increased to nearly 6000 individuals | reindeer |
| **K** | Key deer in Florida numbered roughly ------- individuals in 1957 before wildlife managers began their program to help them | 25 |
| **L** | Long-beaked Echidna now occur only in ------ | New Guinea |
| **M** | Mammals have ------ middle ear ossicles whereas reptiles have one | 3 |
| **R** | Rhesus macaques (monkeys) are able to swim | TRUE |
| **R** | Rhesus macaques (monkeys) in the Florida Keys have ------- | destroyed mangroves |
| **R** | Rhesus macaques (monkeys) released in Florida were originally trapped in ------ | India |
| **S** | State wildlife biologists argued for the construction of culverts under the highway near Wekiva, Florida to protect wandering ------ | Black bears |
| **T** | There is not a marsupial morphological/ecological equivalent to the placental ------- | bats |
| **T** | The rhesus macques released in the Florida Keys were said to be free of ------- | Herpes B |
| **T** | The Florida Mouse is typically found in close association with ------- | gopher tortoises |
| **T** | The grazing placental mammals belong to the order ------- | Artiodactyla |
| **T** | The first mammals appeared in the ------- | Triassic |
| **T** | The ------- are an example of an insectivorous marsupial | bandicoots |
| **T** | The Florida Mouse lives mostly in ------ habitats | sandy scrub |
| **T** | Twenty years after implementing several management practices, the mule deer herd on the Kaibab Plateau is said to have increased to ------ individuals | 100000 |
| **T** | The Key Deer population in the Florida Keys has increased due to protection from hunting and ------ | increased availability of freshwater |
| **T** | There are approximately ------ species of modern mammals | 4600 |
| **T** | The Defenders of Wildlife (an NGO) challenged the USFWS decision not to list the ------ as endangered or threatened | Florida Black Bear |
| **T** | The ------ is actually the marsupial equivalent of the anteaters of South America | Numbat |
| **T** | The ------ is the only Marsupial native to North America | opossum |
| **T** | The Monotremes are characterized by species that ------ | lay eggs |
| **T** | The ------ were mammal-like reptiles that had various combinations of mammalian and reptilian characters | Cynodonts |
| **T** | The first Rhesus macaques were released into the Florida Keys in ------ | 1970s |
| **T** | The Thylacines were exterminated in ------ by sheep growers in the 1930s | Tasmania |
| **T** | The order ------ is the second largest order of placental mammals | Chiroptera |

# **TOPIC 13 Practice**

|  |  |  |
| --- | --- | --- |
| **F** | For populations that are declining managers should try to ------ | reduce mortality |
| **I** | Is an example of a situation where contraceptives might lower natality | Koalas on islands |
| **I** | In Lincoln-Peterson techniques the first step is to ------ several individuals | mark |
| **I** | In species with an estrous cycle paternity is largely determined by the ------ | males |
| **I** | Is a management technique used for benefiting the Black-capped Vireo in Texas | Cowbird removal |
| **I** | If a person with type A blood accidentally receives a transfusion of type B blood, the recipient's ------ will agglutinate the type B blood. | antibodies |
| **I** | In mammals the oocytes only leave the ovary at the time of ------ | ovulation |
| **I** | In abundant populations natality might be reduced by the use of ------ | contraceptives |
| **I** | In female mammals with an estrous cycle ------ | ovulation is not concealed |
| **L** | Lincoln-Peterson techniques are used particularly ------ | secretive species |
| **M** | Most wildlife species have evolved a restricted breeding season because ------ | of the huge energy expense of reproduction |
| **M** | Mule deer on the Kaibab Plateau benefited from the removal of ------ | both of these |
| **M** | Male Platypuses may attempt to ensure paternity by fighting off other males | TRUE |
| **S** | Scientists explored the use of immuno-contraception to control ------ in England | gray squirrels |
| **T** | The immune system works via ------ | cell recognition |
| **T** | The term "rut" refers to the ------ of deer | breeding season |
| **T** | The idea behind using contraceptives in the elephant population in Kruger National Park was to ------ | prevent females from coming into estrous |
| **T** | The removal of brown-headed cowbirds was used as a management tool to protect ------ | golden-cheeked warblers |
| **T** | The USFWS flies fixed length transects in Canada to count ------ | waterfowl |
| **T** | The target population size of game species is always based on ecological or other scientific research | FALSE |
| **U** | Use of feeders and trailmaster cameras allows for direct counting of ------ | Turkeys |
| **W** | When populations are rare, management strategies should try to ------ | increase natality |
| **W** | Wildlife management is aimed mostly at ------ | managing population sizes |

# **TOPIC 14 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | Across the US most bow hunting seasons are separate from gun seasons | TRUE |
| **A** | A basic (as opposed to deluxe) elk hunting trip to Colorado could wind up costing a person around ------ | 2000 |
| **A** | A non-Canadian hunter that kills a bull moose in the Canadian Province of Yukon would have to purchase ------ | all of these |
| **D** | During the winter of 2000-2001 about ------ white-tailed deer died in the Upper Peninsual in Michigan | 102000 |
| **E** | Each year the number of hunters in the US increases | FALSE |
| **H** | Hunters in the state of ------ may kill deer legally with hand-thrown spears | Alabama |
| **I** | In the fall/winter of 2000 hunters in the Upper Peninsula of Michigan killed about ------ deer | 99000 |
| **I** | Is a species in which both males and females are harvested because the two sexes cannot be distinguished in the field | Mourning doves |
| **I** | Is an organization that is totally opposed to sport hunting | PeTA |
| **I** | In Florida ------ of the people actually buy a hunting license each year | < 2% |
| **I** | In Idaho, about ------ of the people actually buy hunting license each year | 20% |
| **I** | In 2001, hunters in Georgia were allowed to kill ------ bucks | just 2 |
| **M** | Most state wildlife agencies argue that hunting mortality is ------ | compensatory |
| **S** | Subsistence hunting is still practiced in the ------ | the Arctic |
| **T** | The ------ act passed in 1937 generated revenue for game and non-game management | Pittman-Robertson |
| **T** | The so-called Buck Law might be effective in allowing for a harvest without reducing the population growth rate, if the species involved has a ------ mating system | polygynous |
| **T** | The FWC divided the state into ------ management zones | 3 |
| **T** | The possession limit for white-tailed deer in Georgia is (2001 season) ------ | 8 |
| **T** | The state of Colorado is subdivided into ------ big game management units | 200 |
| **W** | Wildlifers estimated the number of natural deer deaths in the Upper Peninsula of Michigan by counting carcasses in ------ | in 15 acre plots |
| **W** | Wildlifers and hunters tend to think that most mortality in game populations is ------ | compensatory |
| **W** | With ------ the majority of males are "surplus" in the sense that they do not need to breed in order to maintain population growth | polygyny |
| **W** | White-tailed deer have become pests in parts of the US | TRUE |

# **TOPIC 15 Practice**

|  |  |  |
| --- | --- | --- |
| **B** | Bobwhite Quail populations, for example, should benefit from ------ | higher levels of interspersion |
| **B** | Before the Europeans arrived, the southeastern half of Michigan was dominated by ------ | hardwoods |
| **F** | Following the Lake Mack fire in northern Michigan, the first plants to re-colonize the area were ------ | annual grasses |
| **G** | Grouse belong to the order ------ | Galliformes |
| **I** | Increase in "edge of patch" may ------ | increase certain game bird populations |
| **I** | Is not one of the four members of the Evil Quartet | Mutation |
| **I** | Increased ------ of a habitat patch leads to improved predator access to that patch | edge |
| **J** | Jack Pines tend to grow on ------ soil | sandy |
| **L** | Local (patch-wide) extinctions were higher in ------ | small patches |
| **P** | Prairie chickens are today (2007) found ------ in Michigan | nowhere |
| **P** | Prairie chickens were found nearly statewide in Michigan by the ------ | 1930s |
| **R** | Ring-necked Pheasants thrive in ------ | farmland |
| **S** | Species that belong to the same genus are called ------ | congeners |
| **S** | Species in fragments of habitat have higher extinction rates partly because smaller fragments ------ | support smaller populations |
| **S** | Sharp-tailed Grouse were introduced to the lower peninsula of Michigan | TRUE |
| **T** | The ------ is perhaps the most abundant game bird in Michigan today | ring-necked pheasant |
| **T** | The ------ is an example of a forest interior species that does not occur in wood lots below a certain size | Wood Thrush |
| **T** | The ------ warbler is an example of a species closely related to the blue-winged warbler that lives chiefly in successional habitats | golden-winged |
| **T** | The ------ is a game bird that lives in densely forested habitats of Michigan | ruffed grouse |
| **T** | The sharp-tailed grouse naturally invaded ------ of Michigan | the upper peninsula |
| **T** | The term "Evil Quartet" was first used in conversation by ------ | Diamond |
| **T** | The ------ is an example of a species of songbird that thrives in edge habitat | Rufous-sided Towhee |
| **T** | The ------ Warbler is actually a second or third generation hybrid | Lawrence's |
| **W** | Wildlifers call the degree of patchiness in a landscape the ------ | interspersion |
| **W** | When artificial prairies gave way to open shrub lands and mixed grassland the ------ replaced the prairie chicken | sharp-tailed grouse |
| **W** | Wrote a book called "Where have all the birds gone?" which details the decline of many species of Neotropical migrant birds following tropical deforestation | Terborgh |
| **W** | When Europeans first arrived in what is now the state of Michigan, there were roughly ------ square miles of prairie habitat | 125 |
| **W** | Warblers are hybrids formed by a direct cross between a Golden-winged and Blue winged Warblers | Brewster's |

# **TOPIC 16 Practice**

|  |  |  |
| --- | --- | --- |
| **%** | % if western public rangelands are managed by the BLM and US Forest Service | 85 |
| **A** | At least 10 species of ------ have been introduced to New Zealand for recreational hunting | Deer |
| **A** | ARE/ IS wildlife species that has increased due to the effects on farming | all of these |
| **B** | Bioaccumulation, as once seen in Peregrine Falcons, is the negative effect cause by ------ | pesticides |
| **B** | Blackbuck Antelope are now established in the wild in the state of ------ | TX |
| **C** | Chronic Wasting Disease is a growing problem in the ------ herd of the western US | Mule Deer |
| **C** | Cattle growers in Montana fear that wild bison might transmit ------ to their cattle | brucellosis |
| **E** | Eggshell thinning was a problem for the ------ during the 50s and 60s | Peregrin Falcon |
| **E** | Environmental problems from chemicals used in farming are limited to pesticides | FALSE |
| **F** | Fisheries in the Aral Sea collapsed due to ------ | water extraction for farming |
| **I** | In Thailand, some people want to ranch ------ for their body parts | Tigers |
| **I** | In the late 1990's, the Dead Zone was roughly the size of ------ | New Jersey |
| **I** | Is the chemical once used by Florida tomato growers that has been found to be harmful to the ozone | Methyl Bromide |
| **I** | Is a disease of domestic sheep and possibly wild bighorn sheep | Pasturella |
| **N** | Native Americans in the Yellowstone region oppose the harvest of buffalo that stray from Yellowstone National Park | TRUE |
| **O** | Of the big game species in the west, the ------ are most likely to compete with cattle and sheep | Deer |
| **P** | Presently ------ % of BLM managed lands are grazed by privately owned herds of livestock | 90 |
| **P** | Publicly owned range lands are mostly managed by the BLM and the ------ | US Forest Service |
| **S** | Selenium poising is a problem for water birds especially in farming areas of ------ | California |
| **S** | Species that require dissolved ------ cannot live in the Dead Zone | oxygen |
| **S** | Spontaneous miscarriages can result from ------ infections in domestic cattle | brucellosis |
| **T** | The ------ is a native bird species that apparently can coexist with ranching in South Florida | Crested Caracara |
| **T** | The ------ is a bird on the big island of Hawaii that was negatively impacted by grazing | Palila |
| **T** | The "Dead Zone" is a region of ------ water | hypoxic |
| **T** | The US public owns about ------ acres of rangelands in the 11 western states | 260 million |
| **T** | The ------ protocol signed by Reagan administration banned the production of Methyl Bromide | Montreal |
| **T** | The bare ground that comes from overgrazing can ------ | favor the invasion of non-indigenous plant |
| **T** | The blackbuck antelope is native to ------ | India |
| **T** | The Montana Department of Livestock wants all wild bison that enter Montana from Yellowstone NP to be ------ | shot |
| **T** | The so-called "dead zone" in the Gulf of Mexico is the result of runoff of ------ | fertilizer |
| **W** | Water with no dissolved oxygen at all is called ------ | anoxic |

# **TOPIC 17 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | Argentina manages ----- harvest by forcing hunters to sell the skins to tanneries | Tegu |
| **A** | Are commercially harvested in South America for their skins | Tegus |
| **A** | According to Safina the world fish harvest peaked in 1989 at about ----- metric tons | 80 million |
| **A** | As of the mid-1980s ----- was the nation that imported the highest number of sea turtles | Japan |
| **A** | Are most often traded for meat in southeast Asia | Freshwater Turtles |
| **A** | Aquaculture is good because it has no effect on wild fisheries | FALSE |
| **B** | Because of the "bushmeat" industry various species of ----- are particularly in jeopardy | primates |
| **B** | Bushmeat" refers to meat from animals generally harvested in ----- | the tropics |
| **F** | Fitzgerald reported in her book that $ ----- of snake products were imported in the US in 1985 | 105 million |
| **F** | Fitzgerald claims in her book that ----- live snakes were imported to the US in 1985 | 160000 |
| **F** | Fish and other ocean species are not as important source of food or money for any of today's societies | FALSE |
| **I** | Is an example of a finfish | Seahorse |
| **I** | Introduced ----- are harvested in Argentina for human food | European Hares |
| **I** | Introduced ----- are harvested commercially in Australia | Water Buffalo |
| **I** | In a Scientific American article, Carl Safina argued that the peak harvest of fish came to some fisheries as early as ----- | 1969 |
| **I** | In -----, voters in Florida passed the net ban | 1994 |
| **I** | Is commonly sold as a cancer preventative agent | shark cartilage |
| **K** | Kangaroos are harvested commercially by professional shooters because the ----- | compete with sheep |
| **O** | Over-collecting is a danger for populations of certain ----- in the southwestern US | snakes |
| **P** | Pouches made from Kangaroo ----- are a common knickknack available in markets in Australia | scrotums |
| **R** | Rhino urine and dried seahorses are thought by some to be cures for ----- | asthma |
| **S** | Skins from Asia are fashioned into cowboy boots in the US | snake |
| **S** | Safina wrote a Scientific American article in which he argued that in the 1990s people in the northeastern states shifted from catching cod, haddock and hake to ----- | Dogfish and Skates |
| **T** | The ----- taken from bears are used in several medications in TCM | gall bladders |
| **T** | The ----- are an example of an introduced species that is harvested commercially in Argentina | European Hares |
| **T** | Tortoises are traded heavily as people desire them for use as ----- | pets |
| **W** | Wildlife trade is considered illegal in the US if ----- | it violates US law |

# **TOPIC 18 Practice**

|  |  |  |
| --- | --- | --- |
| **A** | Along with Florida, \_\_\_ I the state with most NIS. | Hawaii |
| **A** | Atkinson argued that \_\_\_ were responsible for the demise of native Hawaiian forest birds | rats |
| **A** | Asian swamp eels are good invaders in Florida as they can | survive in shallow water |
| **A** | Are thought to suffer seriously from predation by green crabs | shellfish |
| **A** | Another example of competition between native and non indigenous species involves \_\_\_ and introduced birds | Hawaiian forest birds |
| **C** | Common Mynas are indigenous to | Asia |
| **C** | Cutthroat trout lay their eggs in | tributaries |
| **I** | Is not one of the reasons listed for Florida being a favorable spot introduced species | High summer temperatures |
| **I** | Introduced to Lake Yellowstone are feared to have a very negative impact on the native population of grizzly bears | Lake trout |
| **I** | In addition to the southeastern US the Rosy Wolfsnail has been introduced to | French Polynesia |
| **I** | Introduced Lake Trout in Lake Yellowstone may grow to \_\_\_ lbs in weight | 40+ |
| **I** | Is a potentil cause of chains of extinctions | deforestation |
| **I** | Is an animal species that is not a member of the Dirty Dozen | red imported fire ant |
| **I** | Ian Atkinson of New Zealand showed that native Hawaiian forest birds suffered from many extinctions following | construction of deep water wharves |
| **O** | On (with) native species is not a negative impact of non indigenous species | mutualism |
| **O** | One problem with introduced lake trout in Lake Yellowstone is that they | eat native trout |
| **P** | Professor Steve Humphrey, found that \_\_\_ competed for food with native Florida beach mice | house mice |
| **R** | Rosy Wolfsnails were introduced to Hawaii | for biological control of another species |
| **R** | Richard Warner found that native Hawaiian birds did not become afflicted with malaria until after the introduction of | mosquitos |
| **S** | Some species of birds have been introduced to the Hawaiian island by US Military personnel | TRUE |
| **S** | Snakeheads in Florida were found to feed chiefly on | crayfish |
| **S** | Species of snakeheads have been introduced into Florida | three |
| **T** | The \_\_\_ invaded the island of Guam at the end of WWII | Brown tree snake |
| **T** | The introduced \_\_\_ in south Florid away disrupt native food webs and compete with wading birds | Asian swamp eel |
| **T** | The \_\_\_\_ introduced to Guam has just about exterminated the native bird species there | Brown tree snake |
| **T** | The so-called "Dirty Dozen" is a list prepared by the | the Nature Conservancy |
| **T** | The flathead catfish is native to | the central US |
| **T** | The green crab was introduced to the US from | Europe |
| **T** | The Dirty Dozen includes \_\_ plants and \_\_ animal species | 6; 6 |
| **W** | Were released on St. Catherines Island off the coast of Georgia | Lion-tailed Macaques |

# **Functional Components of Eco**

|  |  |  |
| --- | --- | --- |
| **A** | Almost all the sulfur dioxide in the atmosphere is formed by \_ | Human activities |
| **A** | A \_ of the following would be an example of a tertiary consumer. | wolf |
| **C** | Carbon fixation occurs typically in \_. | plants |
| **D** | De-nitrification occurs in the absence of \_. | oxygen |
| **G** | Glycogen is a storage molecule for simple sugars characteristically found in \_. | animals |
| **I** | Is the process in which carbon fixation occurs? | photosynthesis |
| **I** | Is the element not found in amino acids or proteins? | phosphorus |
| **I** | In Elton's pyramid scheme for representing tropic levels in a community, the size of each box represented the \_ at a trophic level. | amount of biomass |
| **I** | Is the sixth important element in forming the molecules of life in addition to the element of carbon, hydrogen, oxygen, nitrogen, and phosphorus. | sulfur |
| **I** | In the process of aerobic respiration \_ are broken down to form carbon dioxide and water. | simple sugars |
| **I** | Is a gas that has a rotten egg smell. | hydrogen sulfide |
| **N** | Nitrogen "fixation" refers to the conversion of N2 into \_. | ammonia |
| **P** | Primary consumers are \_ that eat \_. | animals: plants |
| **P** | Plants store simple sugars as\_. | starch |
| **S** | Some species of bacteria convert ammonia to nitrites and others convert it to nitrates in the process called \_. | nitrification |
| **S** | Sulfur dioxide is found in the \_. | atmosphere |
| **S** | Sulfur dioxide is released when \_ is burned. | coal |
| **S** | Some authors claim that egological efficiencies between trophic levels are roughly \_. | 10 |
| **T** | The main molecule in forming acid rain is \_ acid. | sulfuric |
| **T** | The movement of water through plants is called \_. | Transpiration |
| **T** | The \_ refers to the earth's crust. | lithosphere |
| **T** | The main difference between the sulfur and phosphorus cycles is that the sulfur cycle \_. | has an atmospheric component |
| **T** | The breakdown of animal and plant amino acids by bacteria is called \_. | ammonification |
| **T** | The \_ cycle has no atmospheric component. | phosphorus |
| **T** | The conversion of nitrates into nitrogen gas is called \_. | denitrification |
| **T** | The \_ cycle is an example of a sedimentary cycle. | phosphorus |

# **Eco & Wildlife FL**

|  |  |  |
| --- | --- | --- |
| **A** | A "keystone species" is defined as one \_\_\_\_\_ | Whose ecological importance to other species is greater than would be predicted based only on its abundance |
| **A** | Alligators in Lake Apopka have been found with atypical hormone levels and other reproductive abnormalities, which are thought to be the result of \_\_\_. | environmental contamination |
| **A** | Almost 90% of Florida's dry prairies have been converted to \_\_\_. | cattle pastures |
| **A** | American crocodiles superficially resemble American alligators, but the crocodile can be distinguished by its \_\_\_. | narrower snout |
| **A** | As nesting sites for birds have disappeared from Florida's beaches some species such as least terns have taken to nesting on \_\_\_. | buildings with gravel rooftops |
| **A** | As one proceeds down the peninsula from north to south in Florida the biodiversity of mammals, birds, and reptiles and amphibians \_\_\_. | decreases |
| **A** | As the diet of these birds is mostly fish, it is thus not surprising to find \_\_\_ around Florida's lakes and rivers. | ospreys |
| **B** | Bald eagle and osprey populations in Florida and elsewhere have recovered dramatically since the ban on \_\_\_ was implemented. | DDT |
| **B** | Black mangrove is easily recognized by its \_\_\_. | pneumatophores |
| **C** | Cooperative breeding is a trait seen in the \_\_\_. | Florida scrub jay |
| **D** | Dry prairies in Florida are the only habitat that supports \_\_\_. | grasshopper sparrows |
| **D** | Dry prairies in Florida are the primary habitat for \_\_\_. | Northern caracaras |
| **D** | Dry soils are said to be \_\_\_\_\_\_\_ | xeric |
| **E** | Endemic species are those that \_\_\_. | occur only where they evolved |
| **F** | Fires of catastrophic level get everyone's attention, but most wild fires are \_\_\_ acres or less in size. | 50 |
| **F** | Florida freshwater springs are artesian, which means that the \_\_\_. | water flows naturally to the surface |
| **F** | Florida has almost 8, 000 lakes, the majority of which are \_\_\_\_\_\_\_\_\_ | shallow |
| **F** | Florida has more than \_\_\_ rivers. | 1700 |
| **F** | Florida scrub is a pyrogenic system, which means the plants and animals living there are \_\_\_ adapted. | fire |
| **F** | Florida scrub jays commonly bury ----- in open sandy areas. | acorns |
| **F** | Florida's "blackwater" rivers owe their dark color to \_\_\_\_\_ in the water | Tannins |
| **F** | Florida's beaches are the most important nesting sites of the \_\_\_\_\_ turtle in its New World range | Loggerhead |
| **F** | Florida's peninsula is built on an underlying geologic formation consisting largely of \_\_\_\_\_ | Limestone |
| **F** | Florida's scrub ecosystem is characterized by \_\_\_\_\_ plant species | Many endemic |
| **F** | Florida's scrub ecosystem is characterized by \_\_\_\_\_ soils | Sterile |
| **F** | Florida's scrub ecosystem is dependent on \_\_\_\_\_\_ fires | Infrequent |
| **F** | Florida's springs are important places for manatees in the winter because the springs provide a(n) \_\_\_\_\_\_ | Warm-water refuge |
| **F** | Flying squirrels, common inhabitants of temperate hardwood forests, are unusual in that they are the only \_\_\_ squirrel. | nocturnal |
| **F** | Forested wetlands are called \_\_\_. | swamps |
| **F** | Fox squirrels, typically inhabit \_\_\_ in Florida. | high pine sandhills |
| **I** | In Florida, temperate hardwood forests are often called \_\_\_\_\_\_ | hammocks |
| **L** | Least bitterns, clapper rail, and Cape Sable seaside sparrows are bird species commonly associated with \_\_\_. | salt marshes |
| **M** | Mangroves are tropical trees but the \_\_\_ mangrove is the most cold tolerant and occurs farther north than the other two species. | black |
| **M** | Many of the plant species in the tropical hardwood forest ecosystem of southern Florida originated in \_\_\_. | West Indies |
| **M** | Marshes are like swamps except they have \_\_\_. | no trees |
| **M** | Mesic is a term used to describe \_\_\_ soil. | wet or damp |
| **M** | Mortality rate of young alligators is about \_\_\_ percent during the first 2 years of life. | 80 |
| **M** | Most of Florida's 8, 000 lakes are \_\_\_\_\_\_ | Small |
| **P** | Pelicans are strictly surface feeders that don't plunge-dive to capture food. | white |
| **P** | Pelican Island National Wildlife Refuge is located just off the east coast of Florida in the Indian River Aquatic Reserve. While it is a breeding site for pelicans, it is also important because it is the \_\_\_. | first national wildlife refuge in the USA |
| **R** | Red mangrove is easily recognized by its \_\_\_. | prop roots |
| **R** | Restoration of the Everglades ecosystem will depend mostly on \_\_\_. | reducing phosphorus levels |
| **R** | Restoration of the Everglades ecosystem will depend on \_\_\_. | restoring historic water flow |
| **S** | Sand dunes in Florida tend to be higher on the east coast than the west coast because the dunes on the east coast \_\_\_. | face the prevailing winds |
| **S** | Sea turtle hatchlings are disoriented by \_\_\_. | skyshine |
| **S** | Several subspecies of recently extinct and endangered \_\_\_ lived or are still found on sand dunes along Florida's beaches. | beach mice |
| **S** | Significant areas of salt marsh habitat in Florida are eventually likely to be lost to \_\_\_. | global warming |
| **S** | Species that spend most of their lives underground to escape harsh surface conditions are said to be \_\_\_. | fossorial |
| **T** | The \_\_\_\_\_\_ is a common venomous snake in Florida's wetlands | Cottonmouth |
| **T** | The \_\_\_\_\_\_\_ is a species of lizard that occurs ONLY in Florida scrub | Sand skink |
| **T** | The \_\_\_\_\_\_\_\_ is the dominant tree in many of Florida's freshwater swamps | Cypress |
| **T** | The "squeaky" sugar sand on Florida's panhandle beaches is composed primarily of \_\_\_\_ | Quartz |
| **T** | The burrows of gopher tortoises are used by the \_\_\_ as a refuge from predators and harsh environmental conditions. | (both of these) florida mouse and gopher frog |
| **T** | The dominant factor is structuring many of Florida's upland communities is \_\_\_\_\_\_ | Fire frequency |
| **T** | The large rivers in Florida are home to the \_\_\_\_\_\_, which is the largest freshwater turtle in the world | alligator snapping turtle |
| **T** | The length of time that wetland soils are saturated or flooded is called the \_\_\_\_\_ | hydroperiod |
| **T** | The number of people killed by alligators in Florida since the early 1940s is \_\_\_\_\_ | 13 |
| **T** | The single most widespread upland ecosystem in Florida is \_\_\_\_\_\_ | pine flatwoods |
| **T** | The two principal species of salt marsh plants in Florida are \_\_\_\_\_\_ and \_\_\_\_\_\_ | smooth cordgrass and black needlerush |
| **W** | While at the local beach you see \_\_\_ pelicans capturing fish by plunge-diving. | brown |

# **Lecture Guide 2**

|  |  |  |
| --- | --- | --- |
| **A** | Asian carp have become a problem in ----. | Mississippi River |
| **A** | According to McNab, the loss of flight in some island dwelling Carinate birds is likely an adaption of ----. | reducing energy expenditure |
| **A** | According to the michigan Department of Natural Resources, there are actually ---- species of Asian Carp. | 7 |
| **A** | A petition for listing the Cerulean Warblers as threatened was advanced by the ----. | Audubon Society |
| **B** | Brown Tree Snakes have had a devastating effect on the native birds of ----. | Guam |
| **E** | Epidermal scales are an adaptation that first appears in the ----. | reptiles |
| **I** | Introduced Mute Swans differ from native North American swan species in that Mute Swans ----. | do not migrate |
| **I** | Is not considered a species that lives in successional habitat. | Blue-winged warbler |
| **I** | In the Carboniferous ---- evolved in plants as an adaption for a cooling and drying environment. | seeds |
| **I** | In 2014 Oceana reported that globally ---- million sharks were being killed each year. | 73 |
| **I** | Is the cartilaginous fish subgroup of the ratfish. | Holocephali |
| **M** | Mammals first appeared in the ---- period. | Triassic |
| **N** | No ratite birds occur naturally in ----. | Europe |
| **O** | Of the following ---- are an example of fleshy finned fishes (Sarcopterygii). | lungfishes |
| **P** | Paddlefish feed on ----. | zooplankton |
| **S** | Scientists learned recently that 80 mg of --- kills Brown Tree Snakes. | acetaminophen |
| **T** | The Tuatara a unique species of reptiles is found exclusively in ----. | New Zealand |
| **T** | The Shark Conservation Act was encated in ---. | 2011 |
| **T** | The ---- are characterized by reproducing through the use of spermatophores. | salamanders |
| **T** | The idea of Appropriate Management levels is used for managing ----. | wild horses |
| T | The ---- is an introduced species of bird with a very limited range just in Florida, but thought to be very common in the Masarene Islands where it was also introduced. | Red-whiskered bulbul |
| T | The ---- are a legless fossil amphibian group. | Aistopoda |
| T | The columella of reptiles became the --- in mammals. | stapes |
| T | The --- were ratite birds that are now extinct in New Zealand. | Moas |
| W | Was a loon-like bird of the Cretaceous. | Hesperornis |
| W | Wild horses and burros are mostly managed by the ----. | BLM |