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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Agriculture, Food, and Natural Resources |
| **Course Name** | Wildlife, Fisheries, and Ecology Management |
| **Lesson/Unit Title** | Urban Deer Populations - “The Cure” lab |
| **TEKS Student Expectations** | **130.15(c) Knowledge and skills**  (3) The student knows the scientific basis for wildlife management. The student is expected to:  (C) Describe the management of wildlife populations  (4) The student knows the interrelationships between the various aspects of wildlife and outdoor public use management. The student is expected to  (B) Identify laws and regulations regarding the use of wildlife resources  (D) List factors involved in landowner and property rights  (5) The student examines natural cycles and related phenomena to describe ecologic concepts and principles. The student is expected to:  (C) Describe population dynamics |
| **Basic Direct Teach Lesson**  **With Special Education Modifications/Accommodations and**  **one English Language Proficiency Standards (ELPS) Strategy** | |
| **Instructional Objectives** | **The student will be able to:**   * Identify three area locations that have excess white-tail populations * Discuss and describe three “control” measures for urban areas * Complete worksheet/handout on deer populations in urban areas * Develop effective control methods for urban areas. |
| **Rationale** | Examines the management of game and non-game wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. |
| **Duration of Lesson** | Teacher’s Discretion |
| **Word Wall/Key Vocabulary**  *(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* | Owner rights  city-county statutes  fatality  mortality  population density  PETA  SPCA  Game warden  Browse  Drought  natural selection  control methods  trap and release  “put down” |
| **Materials/Specialized Equipment Needed** | **Equipment:**   * Computer * Projector * Laptops   **Materials:**   * Power point “Urban Populations of Deer” * Handout * No. 2 pencils |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Students will discuss deer “sightings” in their counties. Instructor will introduce “pros” and cons” of natural selection-mortality versus man’s control methods to reduce deer populations. A Power Point will show deer in urban/neighborhood settings and county/city people density (Ex. Lake Travis, Kempner) |
| **Direct Instruction \*** | * Students are given handouts with terminology and deer populations for surrounding counties. * Students will research “control methods” proposed or on-going in their counties. * Students will discuss philosophies of what’s humane? - No controls of white tail numbers versus “control methods”? - (over population with starving, diseased deer versus controlled kills. * Students will be challenged to find solutions that are” humane” yet effective in deer population reductions.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Guided Practice \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Students will break up into three groups. Instructor will review handouts and completion guidelines. Groups will break into laptop research units and find current methods used to control white-tail deer populations.  Students in each group will discuss humane methods of live control methods- (dart and release, trapping, sterilization, etc.) and report on cost-effectiveness.  Each group will make a presentation to the class on their findings with one recommendation for urban deer population control and an anticipated cost to property owner, city-county government. - 5 minutes  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** |  |
| **Summative/End of Lesson Assessment \*** | **Assessment Rubric:**  Handout completion - 25 points  Group presentations - 25 points  Group research notes-50 points  **Total – 100 points**  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/Teacher Preparation** | Interstate Publishing-*WL Management,* Jim Lindeman-retired game warden. County Commissioner-Lampasas County |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** | **English/LA -** IV, B, 1, a; V, A, 1, a  **Social Studies -** V, E, 1, a  **Cross Disciplinary Standards** **-** II, E, 1, a |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) |  |
| **Family/Community Connection** |  |
| **CTSO connection(s)** |  |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)