# Data Analysis Project

## Data Analyst: (You)

## Client/Sponsor: Arkansas Game & Fish

## Purpose:

*Over the last 2-5 years, the Arkansas Department of Game and Fish has noticed a steep decline of deer in a specific locale in the Ozark Mountains. They want to figure out what factors may be contributing to this and receive advice on possible routes to counteract it.*

## Scope / Major Project Activities:

*What are the major parts of this project? List out the high-level steps, activities, or stages of the project, and give a brief description for each.*

|  |  |
| --- | --- |
| Activity | Description |
| Gather Data | Gather data sets on wildlife sightings, disease reports, local urban development, weather patterns, and natural disasters relevant to the locale and surrounding areas for comparison. |
| Synthesize Data | Clean any collected data, then analyze the findings to determine possible causes for the population decrease. |
| Create and Distribute Deliverables | Create reports on findings, then research and recommend potential solutions for the department. |

## This project does not include:

*Specify the things that this project isn’t responsible for doing (out of scope). For instance, “this project does not involve a summation of 2019 data analysis”*

* This project is not responsible for cost analysis of proposed solutions, though it will keep budget in mind when making recommendations.
* This project is reliant on previous data sets and does not guarantee any ability to gather new data.
* Suggested implementations will be tackled in separate projects and are not within the scope of this one.

## Deliverables:

*A specific list of things that your project will deliver.*

|  |  |
| --- | --- |
| Deliverable | Description/ Details |
| Synthesized Data Set | After collecting the various data sets for the project, we will create a synthesized data set, combining everything I will use in the project. This raw data set will be shared with the department, as well as a sources sited page to aid any future analysis. |
| Reports | After cleaning the data, reports will be created to show any findings. These reports will be used to make recommendations but will also be shared with the department for their own personal use and reporting. |
| Recommendations | After analyzing the data, recommendations on how to solve the problem will be given. There could be any number of recommendations, with a wide range of emphasis placed on each depending on the severity of the issues discovered. |

## Schedule Overview / Major Milestones:

*The expected schedule for the project. This can be defined by milestones (e.g. “all data is cleaned and processed”), periods of time (“Week 1 / Week 2”), or other ways based on the needs of the project.*

|  |  |  |
| --- | --- | --- |
| Milestone | Expected Completion Date | Description/Details |
| *Data is Gathered* | *Week 1* | *Find all the data sources which will be used in the project and make sure they are fit for the task.* |
| *New Dataset is Synthesized* | *Week 1* | *Put datasets together.* |
| *First Half of Data is Cleaned* | *Week 2* | *Clean half of the tables in the dataset.* |
| *Second Half of Data is Cleaned* | *Week 3* | *Clean all the data in the dataset.* |
| *Data is Analyzed and Discoveries Made* | *Weeks 4-6* | *Analyze the data to find correlations and potential causations.* |
| *Reports are Created* | *Weeks 7-8* | *Create reports to display the most striking discoveries made in a presentable manner.* |
| *Solutions are Researched* | *Weeks 9-11* | *Analyze each of the discoveries made and see if there is a way to reverse or halt any negative effects from the sources.* |
| *Presentations are Created* | *Week 12* | *Create a presentation to share with the department so that all problems can be clearly visualized and all solutions fully understood.* |
| *Deliverables are Delivered* | *Week 12* | *Deliver the datasets, reports, and solution list to the department.* |

## \*Estimated date for completion:

*This is my “if all goes well and I have everything I need, this is when I’ll be done” date.*

The project should be completed within roughly 3 months (12 weeks) of its starting date.