**Prairie Poker**

(with thanks to Jaime Gonzalez of the Katy Prairie Conservancy)

**Objective:** To demonstrate visibly how much of the original coastal prairie is left and what happened to the rest of it.

**Materials:**
Two decks of playing cards

**Grade level:** 6-12

**Background information:**

The original Gulf Coastal Prairie stretched 9 million acres along the Texas and Louisiana coasts. Today, only 1% remains in its original condition, making it one of the most endangered ecosystems on the planet. Understanding what happened to this ecosystem can help us understand the tradeoffs of our decisions. Common misconceptions are that most of the prairie was urbanized and has been converted to impermeable concrete. The reality is that much of this land remains open land but has been changed in such a way that it no longer performs the same ecosystem services or functions as the original prairie.

**Preparation:**
1. Find the ace of spades of both decks. If the decks are different, discard the ace with the smaller visible spade. It will be important that students can see the spade at a distance, it is helpful to have at least one ace that is significantly large.

2. Remove any other three cards, leaving a combined double deck of cards with a total of 100 cards, only one of which is an Ace of spades.

**Activity:**

1. Have students stand in a circle. Explain the purpose of the activity to visually represent the amount of the original Gulf Coastal Prairie which remains today. Ask them to predict how many percent of the prairie remains.
2. Hand out all the cards. It is not important that students have an equal number (although they might be concerned about it). They can look at their cards.
3. Explain that you have just handed out 100 cards, which represent the 100% of the 9 million acres which covered the coasts of Texas and Louisiana 300 years ago. This is a great time to give a brief description of the prairie.
4. Tell students that you will explain some of the changes that have reduced the size of the Gulf Coastal Prairie. As you describe each change, students should remove the relevant cards from their hands (they can be placed on the ground or handed back to you). Once a student has no more cards in their hands, they should sit down (or step out of the circle if you are outdoors).
5. Describe the changes, allowing students to return cards and sit down after each change:
	1. If you have a 2,3 or 4 of any suit, this represents prairie which has been compromised by invasive species. Remove these cards from your hand.
	2. If you have a 5,6,7,8,9,Jack, or Queen, this represents prairie which was converted to ranching and farming. It is no longer as diverse as it was. Removed these cards from your hand.
	3. If you have a King or Ace of Hearts, this represents prairie which has been converted to cities and suburbs. Remove these cards from your hand.
	4. If you have an Ace of clubs or diamonds, This represents prairie which was severely degraded or changed over the years, but is still a prairie. Remove these cards from your hand.
	5. If you have the Ace of spades, please hold it up. Everyone should look at the black ink that makes the ace on this card. That is less than one card. Less than one percent of the original Gulf Coastal Prairie remains. You can see that this is a very endangered and special ecosystem.
6. Conclusion: Ask the students to turn to a neighbor and explain how much of the Gulf Coastal Prairie remains in its original condition and what happened to most of it over the last 300 years. You may also ask students to share something that surprised them about what they just learned.

**Extensions/Possible additions:**

\*Power point can be shown during the activity to clarify directions and/or to illustrate activity
\*Graphing activity suitable for ELL high School students and/or lower middle school students