

# DEALING IPM EDUCATION: ONE CARD AT A TIME

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## ABOUT THE PROJECT

The Kansas State University Integrated Pest Management team is dealing IPM education one playing card at a time by developing a unique tool to teach about integrated pest management control strategies. This was accomplished by developing a traditional 52 card playing deck.

The goal for this Extension project was to create an innovative educational tool which presents the integrated pest management controls in a unique and innovative way. This was needed because stakeholders use integrated pest management strategies in a wide variety of environments, such as in agriculture, landscapes, public buildings, and gardens and it is not an easy concept to teach. In this format, traditional card games can be played to expose learners to the information on the cards.

## IDEAS FOR USE



These playing cards can be used in a variety of ways. In addition to traditional card games, the IPM Cards can be used to demonstrate pest management scenarios, as well as for training employees and/or pest management professionals and students.

Here is the game that was developed and included with the cards:

<p><b>Integrated Pest Management (IPM)</b> is a process that systematically identifies, monitors, and assesses pest risks to determine the most effective, least hazardous method of pest control. This card deck features information and photos of pest management strategies commonly used in IPM.</p> <p>The included message are:</p> <ul style="list-style-type: none"> <li>Biological Control</li> <li>Physical/Mechanical Control</li> <li>Cultural Control</li> <li>Chemical Control</li> </ul>	<p><b>Copy Controls:</b>                  One Hundred Easy Eighteen (18) 2x4 pages</p> <p><b>Objective:</b> By the End Player to get rid of all of the cards in their hand.</p> <p><b>Setting Up:</b> One has cards in each player's hand. One has cards in each player's hand. One has cards in each player's hand. One has cards in each player's hand.</p> <p><b>How to Play:</b> The first player to the dealer's left and continues clockwise. The first player looks at their hand and determines if they have a card that matches the control type listed in number on the top card and the control type. If unable to play, a card must be drawn from the center pile. If they do have a card that matches the control type, they must play it. The control type is the number on the top card. The goal of the game is to be the first player to get rid of all their cards.</p>
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## WHAT IS INTEGRATED PEST MANAGEMENT?

Integrated Pest Management (IPM) is a pest management approach that focuses on long-term prevention of pests through the use of regular monitoring and a combination of tactics. The essential elements of integrated pest management are education, monitoring, pest prevention, use of least hazardous approach to pest control, pesticide use notification, and record keeping. Ultimately, IPM goals are to protect human health, reduce exposure to pesticides, and reduce environmental pollution.

## THE FOUR IPM CONTROLS

Integrated Pest Management promotes four different types of control methods:

1. Physical/Mechanical Controls (i.e. - mulling, caulking cracks, fencing, traps)
2. Cultural Controls (i.e. - tillage, proper irrigation, native plantings, companion planting)
3. Biological Controls (i.e. - diverse landscape, lady beetles, lacewing larvae)
4. Chemical Controls (i.e. - application techniques, aerial application, pesticide label)



## EVALUATION



A survey was created to gather feedback about the organization, playability, and usefulness of the IPM card deck. The information shared is used to improve future versions of the game. In addition, the results from the survey will inform project leadership regarding the effectiveness of playing a card game designed to reinforce the concepts of pest management.

### Evaluation

Leave feedback at: <http://bit.ly/IPMCardDeckSurvey>



## PROCESS

From idea formulation to final product, there were several steps included within this process to develop a quality resource that can be used in a variety of ways. Here are the steps the K-State IPM team took to formulate, create, and ultimately distribute these playing cards.

### Step 1: Idea Formulation - Authors Frannie Miller and Brooke Garcia



### Step 2: Content Creation

- IPM defined (Every Ace Card = Control Definition)
- The four controls (13 cards per each control method)
- Development of game to compliment playing cards
- Joker cards = author cards
- Booklet included with playing cards
- Survey for evaluation
- Captured images to compliment various control methods

### Step 3: Design Process (reference examples, sketch ideas, create prototypes, color scheme selections, proofs, editing)

### Step 4: Ordered through a printing company that specializes in playing cards. Once order was received, playing cards distributed.

## REACH

The IPM Team shipped these cards to various areas of the USA, including Canada (Ontario and British Columbia).

