CAREERS IN FORESTRY TEACHER'S GUIDE

MAKE

THAT

PAPER!

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OVERVIEW

Make That Paper: Careers in Forestry is a scenario-based game that teaches students about working forests and real-world forestry jobs by simulating workplace scenarios and testing forestry industry knowledge through a fun and quirky email inbox interface. In the game, students take on the role of a manager in three different forestry industry career tracks. A branching conversation system with humorous and content-rich dialogue simulates face-to-face interviews that teach players how to present your best foot (hoof? paw?) forward and begin an exciting career in the forestry industry.



ZORA RENARD LANDOWNER The landowner plants and manages a tree farm.



WEN SHERWOOD HARVEST MANAGER The harvest manager supervises the crew that cuts and sells trees. - Conte

TROY TORTELLI MILL MANAGER The mill manager runs the mill that turns trees into goods.

OBJECTIVES

The player has two goals:

1. The sustainable, efficient, and successful management of the forest and production of forest products

2. The use of best practices in hiring and staff management

CTAE AND FORESTRY MANAGEMENT STANDARDS

Make That Paper addresses the following Georgia Standards of Excellence. To read these standards in their entirety, please visit www.georgiastandards.org/.

AGRICULTURE, FOOD, AND NATURAL RESOURCES CAREER STANDARDS

Standard 1: Demonstrate employability skills required by business and industry.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

1.3 Exhibit critical thinking and problem solving skills to locate, analyze, and apply information in career planning and employment situations.

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

1.6 Present a professional image through appearance, behavior, and language.

BASIC AGRICULTURAL SCIENCE	FOREST SCIENCE	FORESTRY SCIENCE II
ANFR-BAS-3 ANFR-BAS-5 ANFR-BAS-6(?) ANFR-BAS-10 ANFR-BAS-12	AFNR-FS-3 AFNR-FS-4 AFNR-FS-5 AFNR-FS-6 AFNR-FS-7 AFNR-FS-8 AFNR-BFS-10 AFNR-FS-11	AFNR-FSII-3 AFNR-FSII-5 AFNR-FSII-6 AFNR-FSII-10

GAMEPLAY AND MECHANICS

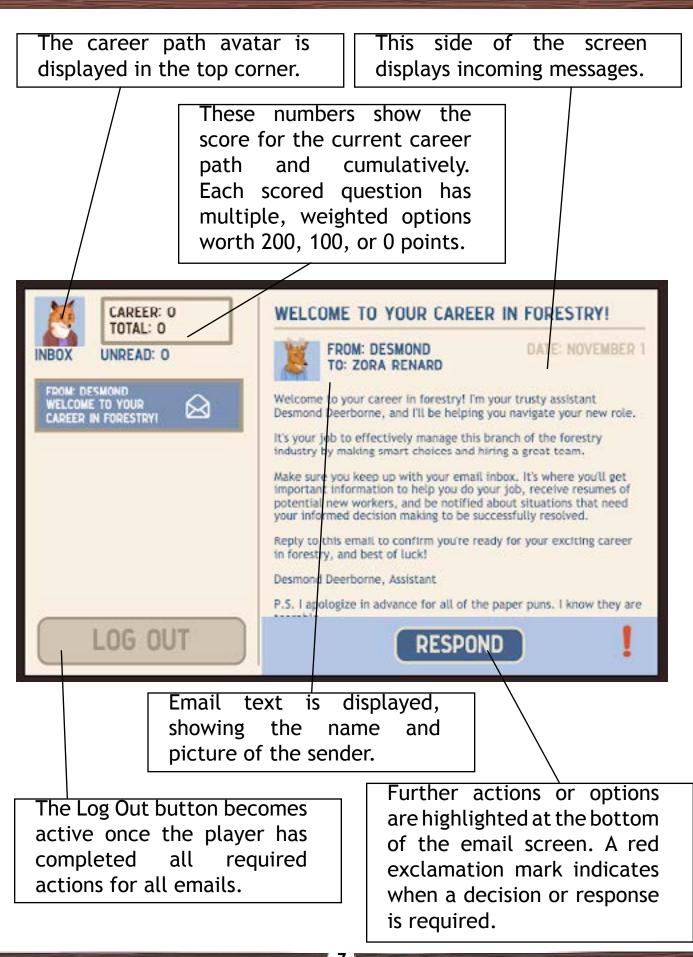
1. The first screen introduces Desmond Deerborne, "your trusty assistant," who serves as the main content vehicle for sharing industry-specific (and CTAE standard) information with the player, as well as gameplay instructions and guidance throughout the game.



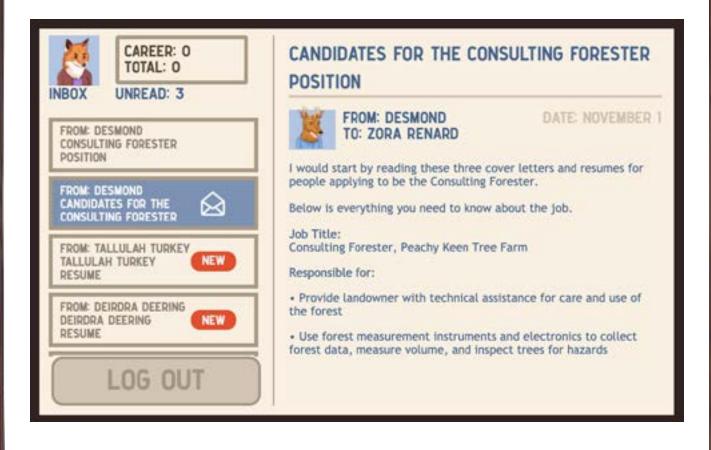
2. The first choice students make is which career path to begin with. Completion of the game requires playing through three different pathways. The overall story shows the cyclical nature of the three forestry industry tracks presented in the game. While the player can play the characters' individual story lines in any order, scenarios in one path will include interactions with the managers from the other paths, showing how the three industries are connected and giving players more insight into the product life of lumber.



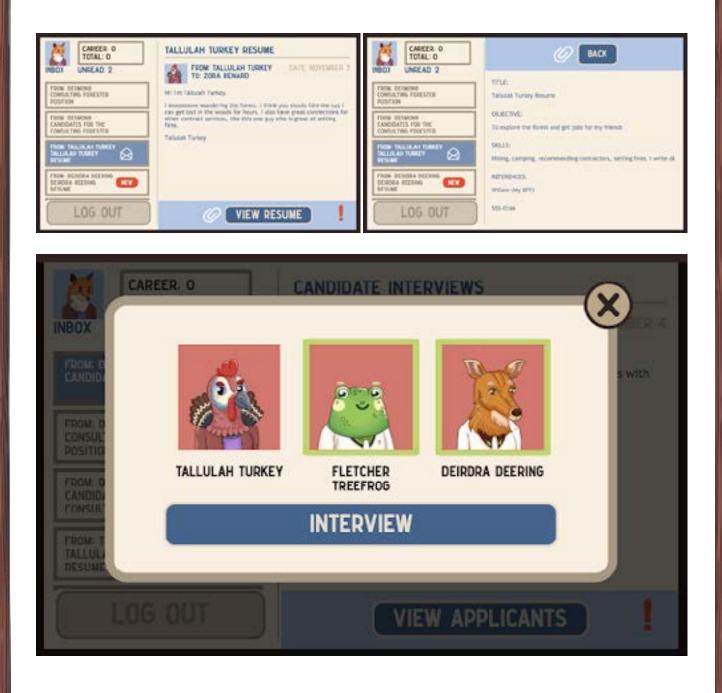
3. Gameplay takes place through a simulated email interface, shown below.



4. The first task the player is given is hiring a new employee for a position which varies depending on the career path being played. Players work through this process a total of three times, once for each career path. The player is provided with a description of the job responsibilities and requirements, as well as three emailed cover letters with attached resumes from three candidates. Some characters are more suited for the jobs they are applying for than others, and it is up to the player to compare the candidates and hire the best critter for the job. Some characters have more experience, while others are new to the industry but have training in important skills.



Step 1: The player reviews three cover letters and resumes. Elements that players evaluate are the tone of the cover letter, relevant experience and training, and quality of references provided. Out of the three candidates, the player selects two to interview.

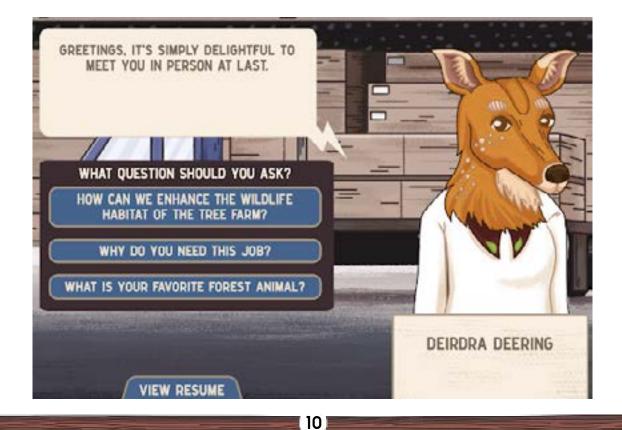


Step 2: During the interview process, the player selects relevant questions to ask each candidate. A list of three options is provided for each question. These weighted options are worth 200, 100, or 0 points depending on their relevance, effectiveness, and appropriateness.

The candidate provides an answer to each question, which clues the player in on how suitable the candidate is for the position.

The player receives better answers if they ask questions that closely align with employability standards and the current track of the forestry industry.

- Interview questions have weighted scores to calculate how well the player is interviewing the candidate.
- Some questions are distractors or inappropriate, and the player will receive poor or unhelpful responses.
- Some answers to poor questions may make the candidate appear more suitable than they are (for example, they may misrepresent their skill or experience).



Step 3: Player reviews follow-up notes from the candidates and selects their choice. Note that the player is not scored based on the candidate they choose to interview or hire, only on the quality of the questions they ask during the interview process.

CAREER: 700 TOTAL: 700	WHO SHOULD WE HIRE?
INBOX UNREAD: 0 FROM: DESMOND CONSULTING FORESTER: SOME LAST MINUTE FROM: DEIRDRA DEERING MY DEEPEST GRATITUDE FROM: FLETCHER	FROM: DESMOND TO: ZORA RENARD DATE: NOVEMBER 30 It's decision time! We need to settle on a forest management plan soon and sort out these tree stands. So, who's the best candidate?
TREEFROG THANK YOU FROM: DESMOND WHO SHOULD WE HIRE?	VIEW APPLICANTS

5. The player proceeds to receive, read, and respond to emails dealing with a variety of industry-related scenarios and business interactions. See the Gameplay Progression Map (below) for details about the industry roles, scenarios, and features that players encounter through each career pathway. Weighted scores are received for each scenario-based question, and the player receives detailed feedback about the effectiveness of their decision as well as any further repercussions.

Example 1:

Player receives email providing background information about upcoming scenario.



Player chooses a response.



Player receives feedback about their decision and its repercussions.



Example 2:

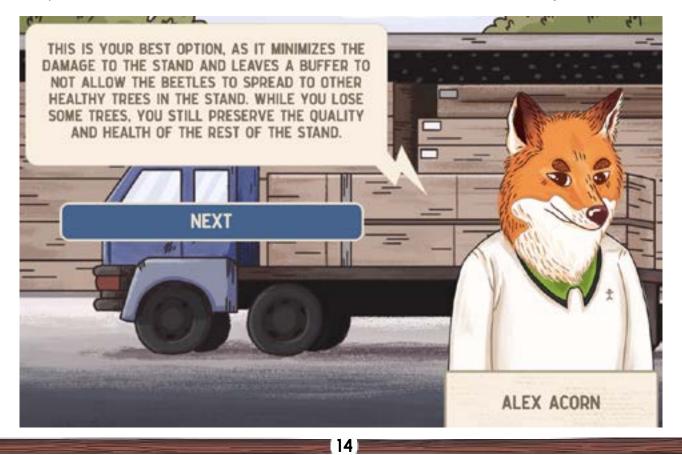
Player receives a description of job responsibilities and requirements.



Player chooses a response to the scenario.



Player receives feedback about their decision and its repercussions.



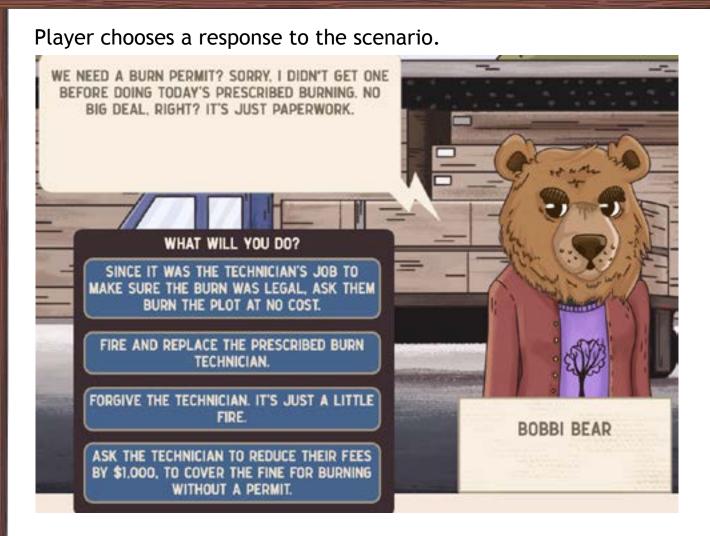
Example 3:

Player is notified of a problem that needs follow up.



Player receives a description of job responsibilities and requirements.





6. At the end of each career path, player receives confirmation that the career track is complete and returns to the initial screen to select another track to play through. The game is complete and player receives a final score when all three career paths have been played.

GAMEPLAY PROGRESSION MAP

This chart shows the specific careers and scenarios encountered in each playthrough. The game provides a description of the responsibilities and requirements for each job. Throughout the game, players are provided with background information that helps their decision making, whether they are hiring personnel or choosing how to deal with potential problems. Following each scenario, the industry expert provides feedback on the player's choice, explaining the impact their decision has on the business.

ZORA RENARD LANDOWNER	WEN SHERWOOD HARVEST MANAGER	TROY TORTELLI MILL MANAGER
Hire a Consulting Forester .	Hire a Timber Buyer .	Hire a Production Manager .
Review three cover letters	Review three cover letters	Review three cover letters
and resumes. Player selects	and resumes. Player selects	and resumes. Player selects
two candidates to interview.	two candidates to interview.	two candidates to interview.
Player selects questions	Player selects questions	Player selects questions
to ask each candidate.	to ask each candidate.	to ask each candidate.
The candidate provides an	The candidate provides an	The candidate provides an
answer to each question.	answer to each question.	answer to each question.
Review follow-up emails	Review follow-up emails	Review follow-up emails
from candidates and decide	from candidates and decide	from candidates and decide
who to hire.	who to hire.	who to hire.

Player receives a newsletter with information about soil characteristics and how they impact the kinds of trees that can be planted.	Email from Mill Manager looking forward to working with Timber Buyer .	Question from a reporter: Most exciting innovations in paper products.
Scenario-based Question: Choose the species and density for planting seedlings given soil characteristics and rainfall levels. Player receives feedback, whether they chose the right species and the optimal density, with an explanation why.	Player receives a newsletter email about gopher tortoises and the important role they play in the forest ecosystem, as well as how to protect during a harvest.	Player receives a memorandum from the Production Manager sharing analysis of the profit and loss report that shows the company's profits are better from selling products they make rather than selling raw materials to other manufacturers.
Consulting Forester communicates about contacting a Conservation Biologist regarding potential infestation of destructive insects. Proposes solution to keep infestation from spreading.	Scenario-based Question: Decide how to deal with gopher tortoise burrows on a harvest site. Wildlife Biologist provides feedback about the results.	Scenario-based Question: How should the company respond to a new congressional nationwide ban on plastic containers and impending market demand for renewable and sustainable alternatives. Player receives feedback.
Contact from Harvest Manager to meet with Timber Buyer and Consulting Forester.	Question from a reporter: Favorite equipment to use on the harvest site.	Email from Safety Compliance Manager about the cost of hiring and training new employees when others quit or get hurt. He recommends starting up workplace training around safer practices and complaint filing procedures.
Conservation Biologist job responsibilities and requirements.	Contact from a Landowner wanting to ensure that the team doesn't cut trees on neighboring property at the harvest site.	Safety Compliance Manager job responsibilities and requirements.

Scenario-based question: Choose measures proposed to stop the spread of southern pine beetle infestation. Player receives feedback about their response.	Log Truck Drive r job responsibilities and requirements.	Email from Log Truck Driver to confirm delivery from tree farm.
Notice received: A prescribed burn permit hasn't been acquired by the Prescribed Fire Technician . Communicate with them to find out why.	Scenario-based question: Choose measures to ensure that boundary lines for harvesting are properly clarified. Player receives feedback.	Scenario-based question: Choose measures to deal with employees testing positive for illegal substances. Player receives feedback about their response.
Reporter asks for a quote about the player's favorite part of being a tree farmer.	Email from Processor Operator expressing concern about the effects of excessive rain on harvesting. Heavy equipment will get stuck in the mud.	Article about equipment maintenance and risk assessment. Repairs lose productivity in the short term, but broken machines are worse.
Prescribed Fire Technician job responsibilities and requirements.	Email about film crew filming on a tree farm so harvesting is halted.	Maintenance Manager job responsibilities and requirements.
Scenario: Player chooses how to deal with someone who has not performed a vital function of their position. Player receives feedback about their response.	Processor Operator job responsibilities and requirements.	Scenario: Player decides what to do when a drying machine is leaking oil, but a big delivery is due tomorrow.
LANDOWNER CAREER TRACK COMPLETE	Scenario: Player decides what to do when three weeks of rain have saturated the ground at the harvest site.	MILL MANAGER CAREER TRACK COMPLETE.
	HARVEST MANAGER CAREER TRACK COMPLETE.	

INSTRUCTIONAL SUPPORT

Teachers may want to engage students to reflect on what they observed and learned from the game using the guiding questions below.

- What did you notice about the candidates for each job? Reflect on each of the following: the tone of the cover letter, experience in the resume, and references provided. What were good and bad examples of each of these?
- During the interview process, what did you learn about the kinds of questions that are most effective? What did you learn from the candidates' answers?
- What impact do you think the interview process of this game might have on what you do when seeking a job?
- Consider the problems faced by each of the characters you played. What helped you decide what to do in each scenario? What kind of similar resources exist in the real world for professionals faced with difficult decisions?