

Instructions:

1. Construct a consequence table that compares **objectives** with **alternative strategies** using 4-6 measurable attributes. Measurable attributes (metrics) are used as a measure of performance, to evaluate how each strategy performs against each objective.
2. Score each **alternative strategy** and **measurable attribute** combination on a **simple numeric scale (e.g., 0-10)** by evaluating the likely outcomes in relation to the status quo (i.e., current conditions) and to one another.
3. Compare how well the different **alternative strategies** perform relative to each **objective**.
4. Are you missing any information? How could you find that information?
5. Are there any strategies that can obviously be eliminated?

Remember from Skill Checks 1 - 3, you have been assigned to lead a team to recover the pinky-purple azax (PPAZ), a federally threatened small, forest-dwelling ungulate. Below are a number of objectives, alternatives, and strategies that the Emeraldium State Fish and Wildlife Agency developed as a potential means of achieving their multiple objectives.

Objectives

Your team has identified the following 4 objectives and a directional goal for each (maximize or minimize). You have also identified at least 1 measurable attribute for each:

Objective	Direction	Example Measurable Attributes (Metrics)	Units*
PPAZ persistence	Max	Recruitment: Probability of PPAZ YOY presence Survival: PPAZ survival rate Dispersal: PPAZ Dispersal rate	prob (0 – 1) rate (0 – 1) rate (0 – 1)
Economic opportunity: timber	Max	Board feet harvested annually	# board feet
Management costs	Min	Cost	Dollars \$
Public happiness	Max	Constructed scale	Define criteria for levels 1 through 5 (worst to best)

*Note:

In practice, you would use models and other methods to estimate the value of each attribute using these units. For this exercise, we do not have this information, so instead consider these units and use a scale of 0-10 to compare relative performance of each alternative strategy against the others (including status quo).

Skill Check 04: Consequence Table

Categories & Action Elements

Your team identified 4 categories of actions (Habitat Protection, Predator Control, Enhance PPAZ Population, and Alternative Economic Activity). You identified several actions that could be taken within each of the categories, as a first step in developing strategies.

<i>Categories:</i>	<i>Habitat Protection</i>	<i>Predator Control</i>	<i>Enhance Population</i>	<i>Alternative Economic Activity</i>
Action elements:	Status Quo Ban logging in critical habitat Develop linkage corridors Reforest habitat buffers for critical zones (tree planting)	Status Quo Harvest (5%) Increase harvest rate of SKAT to 10% Increase harvest rate of SKAT to 50%	None Maternity Pens Captive Breeding Translocate between populations Supplemental feeding in harsh years	None School curriculum on PPAZ ecology Promote non-consumptive recreation

PPAZ Species Recovery Strategy Table

Your team identified 6 viable strategies, shown below, by combining potential actions from the set of categories above. These are the strategies that you must evaluate.

<i>Categories→ ↓ Strategies</i>	<i>Habitat Protection</i>	<i>Predator Control</i>	<i>Enhance Population</i>	<i>Alternative Economic Activity</i>
Status Quo	Status Quo	Status Quo Harvest (5%)	None	None
“On the Go” (Dispersal)	Develop linkage corridors	Increase harvest rate of SKAT to 10%	Translocate	Promote non-consumptive recreation
Increase Pop to Carrying Capacity	Ban logging in 5000 acres of critical habitat	Increase harvest rate of SKAT to 50%	Supplemental feeding	Promote non-consumptive recreation
Increase Economic Opportunity	Tree planting	Increase harvest rate of SKAT to 50%	Captive Breeding	Promote non-consumptive recreation (in non-logged areas)
Balance Concerns	Ban logging in 1000 acres of critical habitat Tree planting	Increase harvest rate of SKAT to 50%	Maternity Pens Captive Breeding	Promote non-consumptive recreation (in non-logged areas)
Max public support	Ban logging in 2500 acres of critical habitat Develop linkage corridors	Increase harvest rate of SKAT to 50%	Maternity Pens Captive Breeding	Promote non-consumptive recreation (in non-logged areas) School curriculum

Skill Check 04: Consequence Table

Please complete this table by considering how the actions within each alternative strategy are likely to impact the measurable attributes. Use a relative scale of 0 – 10.

ALTERNATIVE STRATEGIES								
Objective	Direction	Example Measurable Attributes	Status Quo	"On the Go" (Dispersal)	Increase Pop to Carrying Capacity	Increase Economic Opportunity	Balance Concerns	Max public support
PPAZ persistence	Max	Recruitment: Probability of PPAZ YOY presence	0	2	4	7	10	10
		Survival: PPAZ survival rate	0					
		Dispersal: PPAZ Dispersal rate	0					
Economic opportunity: timber	Max	Board feet harvested annually	8					
Management costs	Min	Cost	0					
Public happiness	Max	Constructed scale	3					