Breeding for Survival

OBJECTIVE

The student will correlate manatees into prospective breeding groups given studbook information.

MATERIALS

- ❑ six copies of page 21, cut into individual sets of cards

BACKGROUND

When developing captive breeding programs, zoological specialists and keepers make the best matches between animals by studying studbook information. A studbook is a comprehensive record of all births, deaths, and interinstitutional transfers of a particular species. This record helps keepers avoid inbreeding individuals by tracking related animals. Studbooks can also tell about each animal's personality and what individuals they do and don't get along with. The U.S. Fish and Wildlife Service currently has a moratorium on breeding manatees in captivity. However, this exercise provides a hands-on manatee management scenario.

ACTION

1. Begin the activity with a class discussion on breeding animals in captivity. What measures would ensure success? What problems would keepers want to avoid?
2. Divide the class into groups of five to six students. Tell them they're to be manatee keepers responsible for developing a new breeding program.
3. Give each student group a set of ***Manatee Logic*** cards and ***Manatee Name*** cards.
4. Tell students to use cards to place manatees into three breeding groups, each containing at least one male and four to five females. Use name cards to form groups; use logic cards to ensure individuals are compatible.
5. When students have finished, review their groupings and allow discussion between groups as to why their breeding groups would or would not be good choices. (There may be more correct choices than those in the Answer Key.)

ANSWER KEY

A1	A2	A3
Rube(M)	Dock(M)	Bink(M)
Sheba	Lotus	Oma
Bea	Blossom	Cleo
Ruby	Isis	Dawn
Skipper	Dolly	Star
Rock	Reva	Oscar
Ethel	Delta	Rosie
B1	**B2**	**B3**
Rube(M)	Dock(M)	Bink(M)
Lotus	Dolly	Skipper
Blossom	Rosie	Rock
Oscar	Oma	Bea
Ruby	Star	Isis
Sheba	Cleo	Reva
Dawn	Ethel	Delta

DEEPER DEPTHS

Continue this activity by developing a *Species Survival Plan (*SSP*)*. SSP is a program for managing captive populations of certain threatened or endangered animals. Plans include an education component, breeding plan, animal care plan, and reintroduction plan. Learn more at the American Zoo and Aquarium Web site: *www.aza.org/ConScience*

Manatee Name Cards

Ethel *Manatee Name Cards*	Delta *Manatee Name Cards*	Rosie *Manatee Name Cards*
Oma *Manatee Name Cards*	Star *Manatee Name Cards*	Dolly *Manatee Name Cards*
Cleo *Manatee Name Cards*	Bea *Manatee Name Cards*	Dawn *Manatee Name Cards*
Sheba *Manatee Name Cards*	Isis *Manatee Name Cards*	Reva *Manatee Name Cards*
Blossom *Manatee Name Cards*	Ruby *Manatee Name Cards*	Lotus *Manatee Name Cards*
Dock (M) *Manatee Name Cards*	Rube (M) *Manatee Name Cards*	Oscar (M) *Manatee Name Cards*
Bink (M) *Manatee Name Cards*	Rock (M) *Manatee Name Cards*	Skipper (M) *Manatee Name Cards*

Manatee Logic Cards

Skipper and Rock don't get along with Oscar *Manatee Logic Cards*	Skipper is Lotus' son *Manatee Logic Cards*	Blossom is so young, she needs to stay with Lotus *Manatee Logic Cards*
Dock is aggressive toward all other males *Manatee Logic Cards*	Rock is an immature male *Manatee Logic Cards*	Oscar is an immature male *Manatee Logic Cards*
Skipper is an immature male *Manatee Logic Cards*	Dawn is Dock's daughter *Manatee Logic Cards*	Ruby and Bea are aggressive toward Dock *Manatee Logic Cards*
Ruby and Dolly don't get along *Manatee Logic Cards*	Sheba is Dock's daughter *Manatee Logic Cards*	Sheba and Bink were unsuccessful at breeding with one another *Manatee Logic Cards*