

## SYMBIOTIC RELATIONSHIPS

| Organisms                              | Relationship | Explanation of Relationship   |
|--|--------------|---|
| 1. <b>DEER / TICK</b>                  | parasitism   | ticks feed on deer blood to the deer's detriment – nutrient loss, disease transfer  |
| 2. <b>SILVERFISH / ARMY ANTS</b>       | commensalism | silverfish live and hunt with army ants - they share the prey, but they neither help nor harm the ants  |
| 3. <b>CUCKOO / WARBLER</b>             | parasitism   | a cuckoo may lay its eggs in a warbler's nest - the cuckoo's young will displace the warbler's young and will be raised by the warbler  |
| 4. <b>OSTRICH / GAZELLE</b>            | mutualism    | ostriches and gazelles feed next to each other and both watch for predators and alert each other to danger.<br>since the visual abilities of the two species are different, they each can identify threats the other animal would not as readily see and both species benefit |
| 5. <b>HERMIT CRAB / SNAIL SHELL</b>    | commensalism | hermit crabs live in shells made and then abandoned by snails which neither harms nor benefits the snails   |
| 6. <b>WRASSE FISH / BLACK SEA BASS</b> | mutualism    | wrasse fish feed on the parasites found on the black sea bass's body - both species benefit   |

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| <b>7. BEE / MARABOU STORK</b>        | commensalism | the stork uses its saw-like bill to cut up the dead animals it eats and as a result, the dead animal carcass is accessible to some bees for food and egg laying         |
| <b>8. OXPECKER / RHINOCEROS</b>      | mutualism    | oxpeckers feed on the ticks found on a rhinoceros - both species benefit  |
| <b>9. COWBIRD / BUFFALO</b>          | commensalism | as buffalos walk through grass, insects become active and are seen and eaten by cowbirds which neither harms nor benefits the buffalo.                                  |
| <b>10. MISTLETOE / SPRUCE TREE</b>   | parasitism   | mistletoe extracts water and nutrients from the spruce tree to the tree's detriment   |
| <b>11. HONEY GUIDE BIRD / BADGER</b> | mutualism    | honey guide birds alert and direct badgers to bee hives and then badgers expose the hives and feed on the honey - then the honey guide birds eat - both species benefit |
| <b>12. BARNACLE / WHALE</b>          | commensalism | barnacles create home sites by attaching themselves to whales which neither harms nor benefits the whales   |