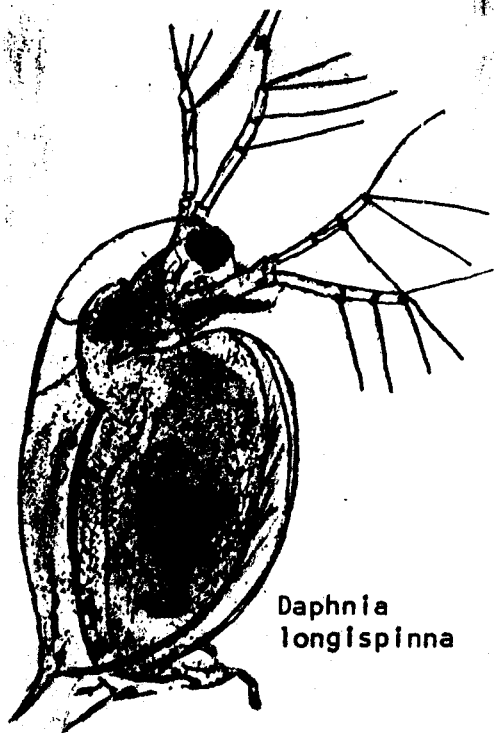


DAPHNIA

BY - DICK STOBER



Daphnia
longispinna

IT IS ALWAYS DIFFICULT TO DESCRIBE DAPHNIA TO A PERSON. THEY ARE SMALL CRUSTACEANS ABOUT THE SIZE OF FLEAS APPEARING IN TEMPERATE TO COLD WEATHER, BUT NOT HOT, IN FRESH WATER ALMOST EVERYWHERE. AS A MATTER OF FACT, I HAVE FOUND THEM IN STANDING PUDDLES IN THE MIDDLE OF A COW PASTURE. SO YOU CAN FIND THEM WHERE EVER CHANCE TAKES THEM. DAPHNIA MAY BE ALMOST COLORLESS, GRAY, GREEN OR RED, DEPENDING ON THE PARTICULAR VARIETY. COLORLESS DAPHNIA WILL OF COURSE TAKE ON THE COLOR OF THE FOOD IT HAS ASSIMILATED. IN OUR AREA THIS IS THE VARIETY WHICH I HAVE GATHERED APPEARING GREEN BECAUSE OF THEIR OBVIOUS TASTE FOR ALGAE. DIFFERENT SPECIES CAN ALSO VARY CONSIDERABLY IN SIZE.

TO COLLECT DAPHNIA IT HELPS TO HAVE A SPECIAL TYPE OF NET MADE OF CHEESECLOTH OR MEDIUM-FINE NYLON. THE BOTTOM OF THE NET IS BEST ROUND AND NOT POINTED. NEXT YOU LOOK FOR A POND, DRAINAGE DITCH OR SWAMP AREA WHERE THE WATER IS STAGNANT. IF YOU HAVE WATCHED PONDS AND STREAMS WITH ANY CONSISTENCY YOU WILL NOTICE DRAMATICALLY THAT MOST POND LIFE GO THROUGH CYCLES. A SPECIE AS DAPHNIA MAY ABOUND FOR A TIME, THEN APPEAR TO DIE AWAY ONLY TO RE-APPEAR EVEN STRONGER AT A LATER DATE. THIS VARIES EVEN FROM YEAR TO YEAR. I HAVE FOUND THE BEST TIME TO COLLECT DAPHNIA IS VERY EARLY IN THE SPRING, BUT IF YOU ARE PERSISTENT YOU CAN FIND SOME ALMOST ALL YEAR LONG. ALSO YOU WILL HAVE BEST RESULTS IF YOU LOOK FOR DAPHNIA EARLY IN THE MORNING, ABOUT DAYBREAK BEFORE THE WIND HAS STARTED TO RIPPLE THE WATER.

REFRIGERATOR LINERS ARE GOOD FOR CULTIVATING DAPHNIA. THE PORCELAIN OR BAKED ENAMEL COATING PROVIDES A GOOD REFLECTING SURFACE FOR SUNLIGHT WHICH HELPS PROMOTE THE GROWTH OF GREEN ALGAE ON THE SIDES AND IN THE WATER AS A SUSPENSION. FROM TIME TO TIME MOTHER NATURE ADDS A FEW LEAVES AND WE ADD SOME DROPPINGS FROM THE BOTTOM OF OUR PET BIRDS' CAGE. CRUSHED LETTUCE IS ALSO A GOOD FOOD. MIDSUMMER HEAT IS HARD ON DAPHNIA SO ITS BEST NOT TO LET THE WATER GET TOO WARM. DURING THE HOT SUMMER MONTHS IT IS BEST TO KEEP THE LINERS OUT OF THE DIRECT SUNLIGHT AND ADD FRESH WATER DURING THE DRY PERIODS. DAPHNIA, IF GIVEN THE PROPER ENVIRONMENT, WILL THRIVE AND MULTIPLY AT A RAPID RATE. SOME PEOPLE START THEIR CULTURES BY SEEDING THE LINER WITH DRIED DAPHNIA WHICH IS A STANDARD FISH FOOD. THE DAPHNIA EGG MUST BE PRETTY TOUGH TO BE ABLE TO RE-GENERATE LIFE AFTER BEING DRIED OUT FOR LONG PERIODS OF TIME, MUCH LIKE THE BRINE SHRIMP EGG. IN NATURE THE EGGS LAY DORMANT IN A POND DURING THE HOT WEATHER AND A PASSING DUCK OR WATER BIRD OF SOME KIND MIGHT NIBBLE ON GRASS WHICH CONTAINS DAPHNIA EGGS, FLY AWAY AND IN THE COURSE OF INGESTION, DIGESTION, AND EXCRETION, THE LITTLE INDIGESTABLE LITTLE OLE DAPHNIA EGG MIGHT FIND HIMSELF IN A PUDDLE OF WATER IN THE MIDDLE OF SOME COW PASTURE, MILES AWAY.

(CONT'D. - NEXT PAGE)

DAPHNIA - CONT'D.

DAPHNIA FEEDING HAS SOME DISADVANTAGES ALONG WITH ITS BENEFITS. THE SOFT, INSOLUABLE SHELL OF THE DAPHNIA CAN ACT AS A LAXATIVE ON FISH THAT ARE UNACCUSTOMED TO EATING THIS MORSEL. COMMON SENSE TELLS US TO START OFF BY FEEDING A LITTLE AT A TIME AND OF COURSE GIVE YOUR FISH A VARIED, BALANCED DIET. ONE MIGHT GET TIRED OF EATING THE SAME THING THREE TIMES A DAY, DAY IN AND DAY OUT. I KNOW I WOULD. ANOTHER POSSIBILITY WOULD BE THE INTRODUCTION OF PARASITES AND MICROSCOPIC LARVAE OF OTHER BAD GUYS INTO THE PROTECTED ENVIRONMENT OF THE HOME AQUARIA. RAISING YOUR OWN DAPHNIA WILL LESSEN THIS POSSIBILITY CONSIDERABLY. THE PROOF OF THE PUDDING IS IN THE EATING AND LARGE, HEALTHY, PROLIFIC FISH WILL BE REASON ENOUGH FOR MAINTAINING A DIET RICH IN LIVE FOOD SUCH AS DAPHNIA.
