

EXCERPTS FROM RICHARD CONNIFF'S ON THE LOWLY WORM WE
EARTHLING SPIN OUR LOFTIEST DREAMS, FROM *SMITHSONIAN
MAGAZINE*, JULY, 1993, PGS. 86-88. _____ ON CHARLES DARWIN'S
WRITINGS ON THE EARTH WORM

WORMS WERE ALSO A LIFELONG INTEREST FOR NO LESS A
NATURALIST THAN CHARLES DARWIN, WHO ONCE WROTE:

IT MAY BE DOUBTED WHETHER THERE ARE MANY OTHER ANIMALS, WHICH HAVE
PLAYED SO IMPORTANT A PART IN THE HISTORY OF THE WORLD

(86)

CHARLES DARWIN'S LAST BOOK, *THE FORMATION OF VEGETABLE MOULD*,
PUBLISHED IN 1881, WAS THE FIRST METHODOICAL STUDY OF
EARTHWORMS..... DARWIN CAME TO RECOGNIZE THAT WORMS ARE
INCREDIBLY NUMEROUS, CITING ONE ESTIMATE (MODEST, IN
RETROSPECT) THAT 56,767 WORMS PER ACRE FORAGED THROUGH AN
ORDINARY GARDEN. HE ALSO DEMONSTRATED THAT WORMS
TRANSFORM THE EARTH BY EATING THEIR WAY, OVER AND OVER,
THROUGH THE ENTIRE UPPER SOIL LAYER.

A WORM CAN CONSUME ABOUT 30 PERCENT OF ITS OWN WEIGHT DAILY
IN PLANT MATTER, MINUTE ANIMALS AND DIRT, MUCH OF WHICH GETS
EXCRETED ON THE SURFACE IN THE FAMILIAR, COILING HEAPS KNOWN
AS WORM CASTS (*HUMUS*). FROM THE CASTS AT ONE SITE, DARWIN
CALCULATED THAT EARTHWORMS BROUGHT 18 TONS OF SOIL TO THE
SURFACE EACH YEAR.
THAT NUMBER FALLS WELL WITHIN MODERN ESTIMATES. **IN THE NILE
DELTA, AN EXTREME CASE, EARTHWORMS ANNUALLY DEPOSIT 1,000 TONS
OF CASTS PER ACRE** _____ A WEIGHT EQUIVALENT TO 500 JUNKED CARS BUT
CONSIDERABLY MORE USEFUL TO FARMERS.

(87-88)

ABOVE ALL, DARWIN WON POPULAR ACCEPTANCE ... THAT WORMS
MAKE THE GROUND SUITABLE FOR PLANTS. THEY AERATE AND DRAIN
THE SOIL WITH THEIR BURROWS, DRAG DOWN LEAF FRAGMENTS TO
GRIND UP FOR FOOD AND

MINGLE THE WHOLE INTIMATELY TOGETHER, LIKE A GARDENER WHO PREPARES FINE
SOIL FOR HIS CHOICEST PLANTS

LONG BEFORE THE ADVENT OF THE PLOW OR OF THE HUMAN RACE
ITSELF, DARWIN WROTE:

THE LAND WAS IN FACT REGULARLY PLOUGED BY EARTHWORMS

(88)