

Ch. 1

Thursday, August 21, 2008
10:21 AM

Science is Amoral

GMO - genetic
modified
Organism

Agriscience -

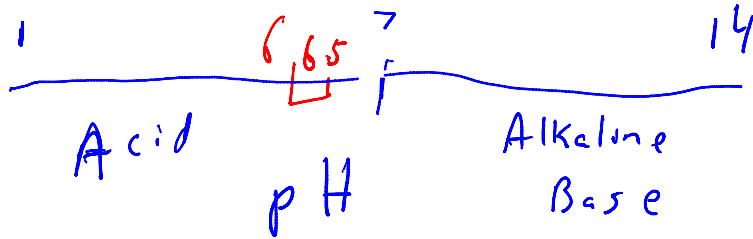
Agribusiness
Ag Resources

USDA
FSA NRCs

Technology

Aquaponics

Soil Science



Biotechnology

Bacillus thuringensis

B+

IPM

Organic

Fertilizer - Minerals

Major

Nitrogen Phosphorus Potassium

N - P - K

$$10 - 10 - 10 = 30$$

$$\begin{array}{r} 100 \text{ lb,} \\ \times 30\% \\ \hline 30 \text{ lb,} \end{array}$$

Bio = life

logy = study of

Ch. 2

Thursday, September 06, 2007
9:44 AM

Sewage-

- 1 Primary - mechanical
2. Secondary - Biological - Bacteria
aerobic
Anaerobic
3. Tertiary - Chemical

Point Source pollution

Non - " " "

Log - 16'
cruising timber } bd ft

Food -

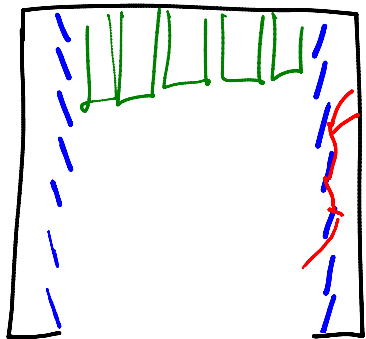
Norman Borlaug

Climate

Aquifer - layer of rock saturated
w/ water

T

Insects - IPM



Diseases

West Nile
Mad Cow Disease

Scrapie

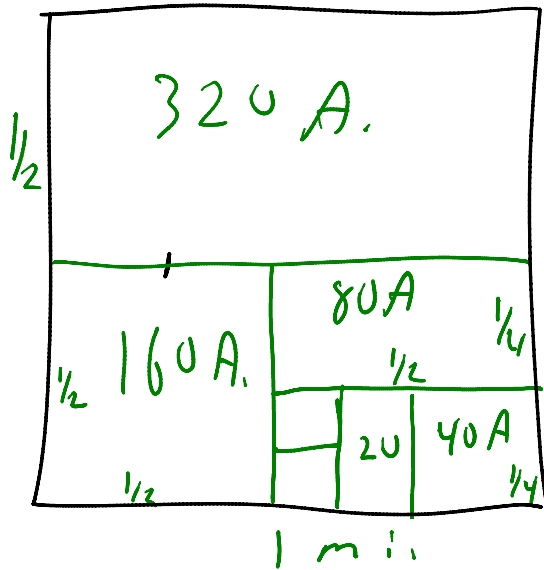
Pseudorabies

Chronic Wasting Disease - CWD

Zoonoses

Yield - bu/A

	1800	1940	1960	1985	1990
Wheat	15	15	20	34	39.8
Corn	25	29	55	118	118.5



1 sq. mile =
 1 mi. | section

640 Acres

Legume - nitrogen Fixing
 plant

SB - tofu

Lysine

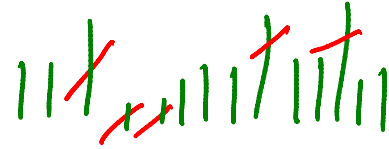
American Farmer - 140 people

Hybrids

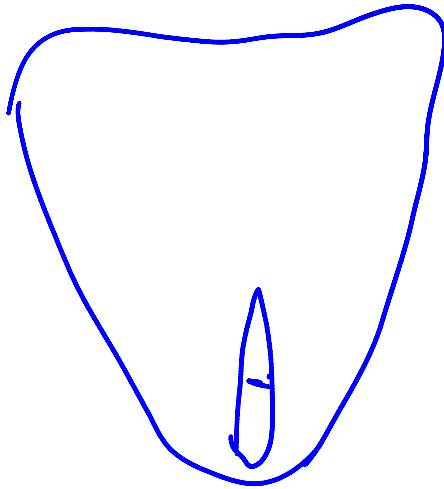
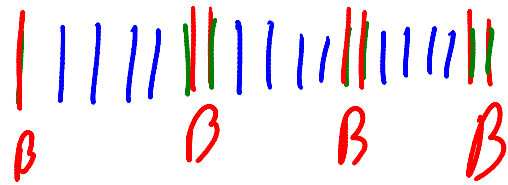
Thursday, August 30, 2007
8:49 AM

pure line - pure bred

A X B



hybrid AB



BIO -

SELECTIVE BREEDING

GENETICS - STUDY OF HEREDITY

PROGENY

DEOXYRIBONUCLEIC ACID

A, G, C, T

BIOTECHNOLOGY

Bio tech.

Tuesday, September 16, 2008

10:04 AM

Bio-life

more selection

Genetics

Heredity

progeny - EPD's
expected Progeny Diff.

DNA -

Adenine

Guanine

Cytosine

Thymine

Growth Stimulants

Hormone

Steroid

Enhancer

Microbe - microscopic plant + animals
insulin

Safety

0 1

Ethics - moral principles

1. What does DNA stand for?
2. What is heredity?
3. What is the smallest unit of biological inheritance?
4. What does the term "progeny" mean?
5. Name 2 different types of organisms that can be genetically altered.
6. Why are some people/countries scared of food that has been genetically modified?

Careers

Monday, September 22, 2008

10:27 AM

Job - specific task

Career - formal Ed

Salary -

BENEFITS

VACATION

INSURANCE

SICK LEAVE

PERSONAL DAYS

CO. CAR

SATISFIED

LIKE WHAT YOU ARE DOING

FAIR \$\$\$

STANDARD OF LIVING

LOCATION

SECTORS OF AGRICULTURE

1. AG. PRODUCTION
2. AG. PROCESSING
3. AG. MECHANICS
4. AG. SALES & SERVICE
5. AG. MKT & BUSINESS MGT
6. HORTICULTURE

7. FORESTRY

8. RURAL REC. & NATURAL RESOURCES

Leadership - one who shows
the way

Smith-Hughes Act - 1917

Henry Groseclose - FFAV
Father of the FFA

1928: Future Farmers of America

1st Nat'l Conv. - KCMO

1930 - Adopted FFA Creed
revised - 1965 + 1990

Iowa Charter - 1929

1939 - Alexandria, VA Nat'l FFA Center
Mt. Vernon

1944 - Nat'l FFA Foundation

1950 - Public Law 740

1965 - merged with NFA

1969- Girls Admitted

1971- FFA Alumni!

1988- name change

The Nat'l Future Farmers of America -
to The Nat'l FFA Organization

leadership, citizenship, + Cooperation

1998- Nat'l FFA Center, Indy

FFA Emblem

Cross section Ear of Corn - Common Ag
Interest

Eagle - National Symbol

Plow - labor + tillage of the soil

Owl - Knowledge

Rising Sun - new era in Ag.

FFA Colors

National Blue
Corn Gold

Motto

Learning to do,
Doing to Learn,
Earning to Live

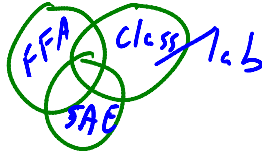
Living to serve.

Salute

Pledge of Allegiance

Essentials of a Successful Chapter

1. Integral Relationships
2. Knowledge of the FFA
3. Share responsibilities
4. Capable officers
5. Challenging P.O.A.
6. Workable Constitution
7. Proper equipment + Records paraphernalia
8. Adequate Finances
- 9.



Ch. Officers

President - Rising Sun

V.P. - Plow

Secretary - Ear of Corn

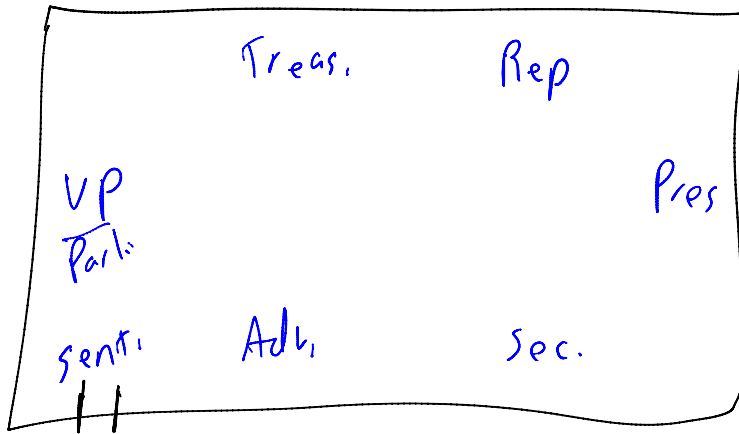
Treasurer - Bust of Washington

Reporter - Flag

Sentinel - Shield of Friendship

* Parliamentarian - Robert's Rules of Order

Advisor - ex-officio - Owl



Order of Business

1. Opening Ceremonies
2. Minutes of Prev. Mtg
3. Officer Rep.
4. Sp. Features
5. Unfinished Bus
6. Comm. Rep.
7. New Bus.
8. Ceremonies
9. Closing Ceremonies
10. Rec.

Parli' Pro

1. to discuss 1 thing at a time
2. Let the majority rule
3. protect rights of minority

Gavel

- 1 tap - adjournment, completes motion

sit;

2 taps - Calls mtg to order

3 taps - Stand

To practice brotherhood, honor agricultural opportunities and responsibilities and develop those qualities of leadership which an FFA member should possess.

Director of IA FFA Foundation Wayne Nattress

IA FFA Advisor - Dale Gruis

IA FFA Executive Secretary/Treasurer - Alan Spencer

Nat'l FFA Advisor - Larry Case

Voting

voice

Raising - hands or standing

Secret Ballot -

Making Motions

I move to / that

2nd

Discussion

vote

Privileged motion

time to adjourn
Adjourn
Recess
Question of privilege
Call for orders of the day

Incidental motions

Appeal
Point of order
Suspend the Rules
Withdraw a motion

Subsidiary Motions

Lay on the table
Previous Question
Limit debate
Postpone
refer to comm.
Amend

SAE

Thursday, October 18, 2007

9:45 AM

RECORDS

TAXES

MANAGEMENT

ENTREPRENEUR

PLACEMENT

SAE

#7

Thursday, November 08, 2007
9:24 AM

Air Quality

Habitat

Biome-

Trees - O_2 , shade, Food, building materials, paper,

ppm - parts per million

Radon - from radium

Radioactive material

Pesticides.

LD - lethal Dose

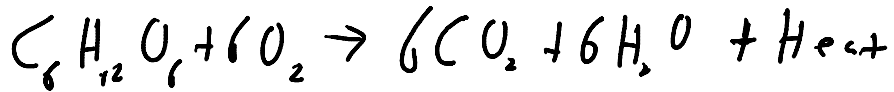
Asbestos -

Friable -
non-Friable -

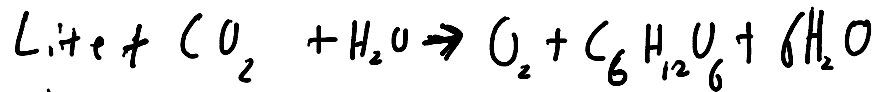
GH Effect

Plants

Respiration -



Photosynthesis -

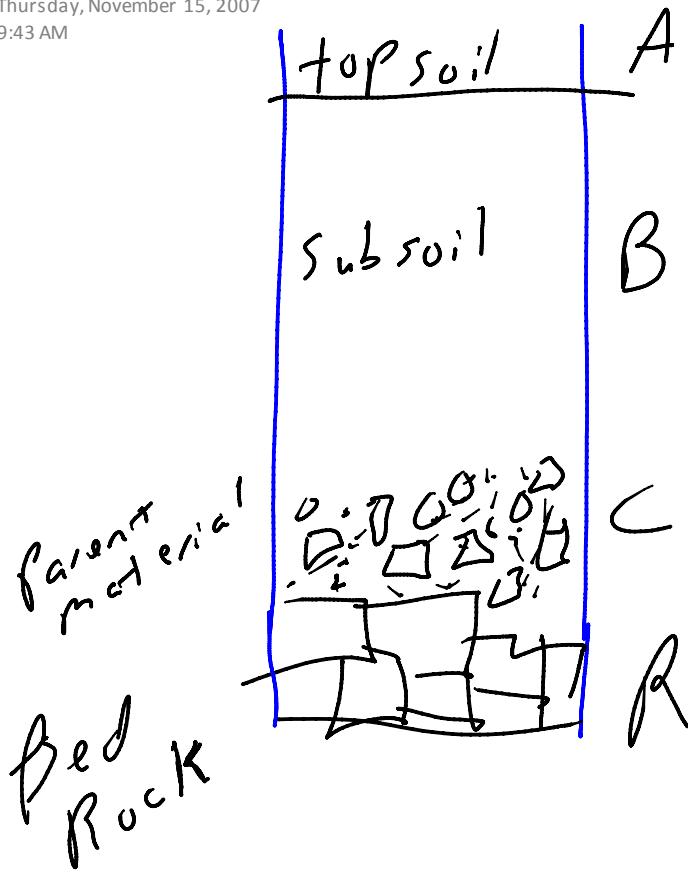


Transpiration

Water + Soil Cons.

Thursday, November 15, 2007
9:43 AM

Soil Profile



Aquifer

potable - drinkable

~~Food Chain -~~
Web

Universal Solvent -

irrigation -

Irrigation -

NRCS

FSA

WATER WORKS

PURITY OF WATER

EROSION

CRP - TEN YEAR

CONSERVATION TILLAGE

CONTOURING

STRIPCROPPING

NO-TILL

RIDGETILL

COVER CROP

GEOGRAPHICAL EROSION

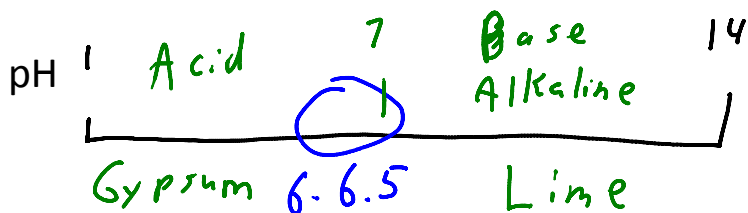
SHEET EROSION

GULLY EROSION

MULCH

CROP RESIDUE

CROP ROTATION



GRASS WATERWAYS

TERRACE VS. DIVERSION

FOREST MANAGEMENT

Thursday, January 03, 2008
9:21 AM

CONIFERS - EVERGREENS

DECIDUOUS - DORMANT

WOOD - CORD	4 X 4 X 8
	W X H X L 128

LUMBER - DIMENSIONAL

BD FT - 1" X 12" X 12"

~~T X W X L~~
144

$$\begin{array}{l} 2 \times 4 \quad 8' \\ \swarrow \quad \downarrow \\ 8'' \quad 96'' \end{array} = 768''$$

5.33 bd ft

$$144 \overline{) 768}$$

CRUISING TIMBER

DBH - 4.5' - 54"

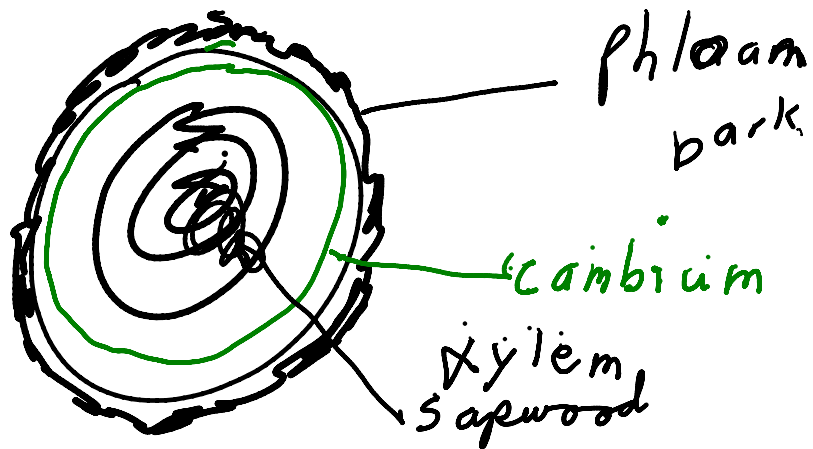
DIAMETER - DENDROMETER

BILTMORE STICK

TREE CALIPER

DIAMETER TAPE

HEIGHT - HYPSONOMETER



VALUE OF TREES

OXYGEN

LUMBER

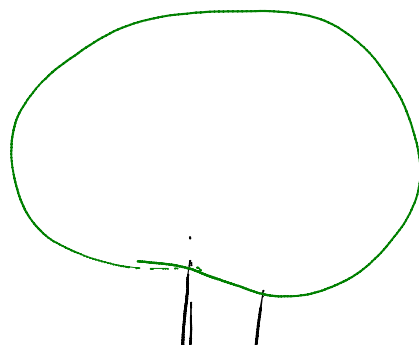
FOOD

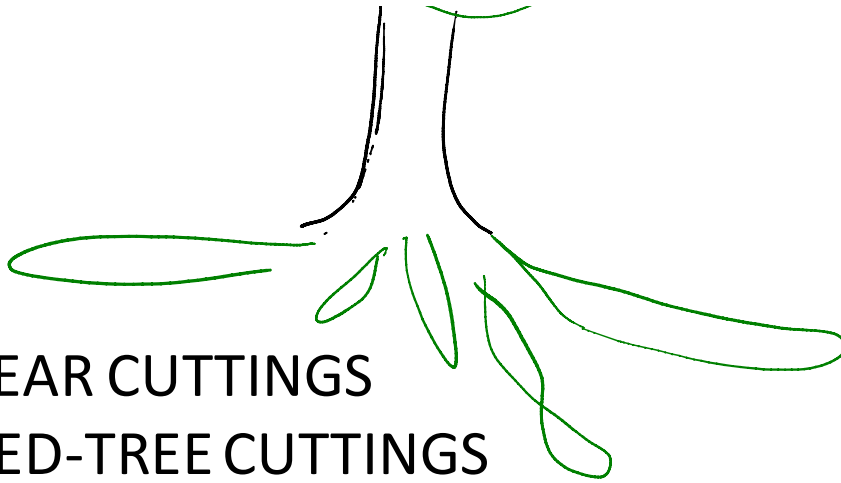
SHADE

PAPER

HABITAT FOR WILDLIFE

ORNAMENTAL





CLEAR CUTTINGS
SEED-TREE CUTTINGS
SHELTERWOOD CUTTINGS
DIAMETER LIMIT CUTTINGS
SELECTION CUTTINGS
SALVAGE CUTTINGS

PROTECTING WOODLOTS

FIRE

PESTS - IPM

DOMESTIC ANIMALS

SEASON LUMBER

MIRAMICHI

PESHTIGO

GREAT CHICAGO FIRE

YELLOWSTONE FIRE - 1998

2.1 MILLION ACRES OF FORESTED LAND IN

IOWA - 5.7%

MEASURING TREES

DIAMETER

BILTMORE STORE

DIAMETER TAPE

TREE CALIPER

HIEGHT - HYPSONOMETER

BILTMORE STICK

ABNEY LEVEL

HAGA ALTIMETER

SUUNTO CLINOMETER

SHADE TOLERANT

CONVERTING WOOD

LUMBER, PAPER, FURNITURE,
GUM, CHARCOAL, EXPLOSIVES,
PLASTICS

SOIL CONSERVATION

WEEKS LAW OF 1911

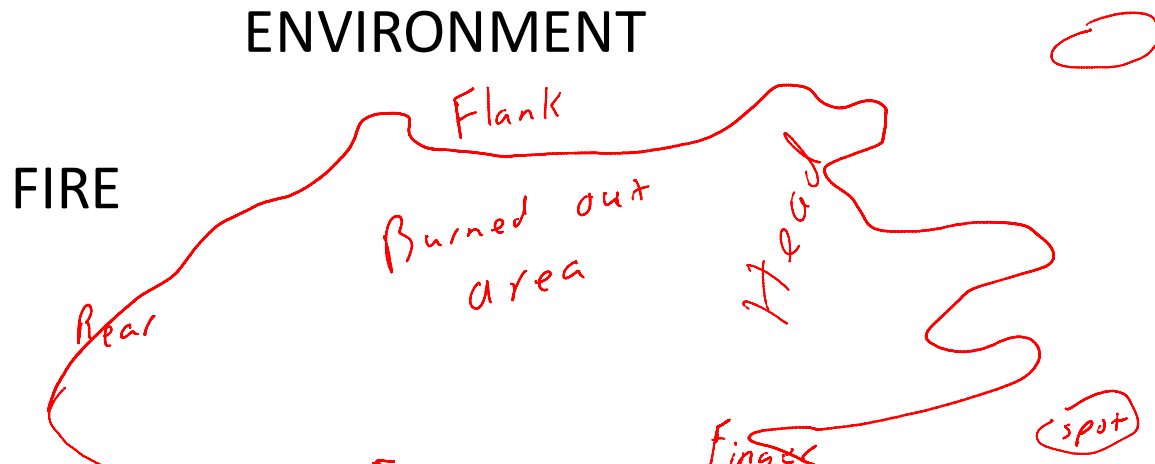
FOREST ENEMIES

INSECTS

BARK BORERS
DEFOLIATORS
WOOD BORERS
TIP FEEDERS
SAP SUCKERS
GALLING INSECTS
SEED EATERS
ROOT FEEDERS

CONTROL

NATURAL
IPM
PATHOGEN
ALLELOPATHY
WILDLIFE
GRAZING
ENVIRONMENT



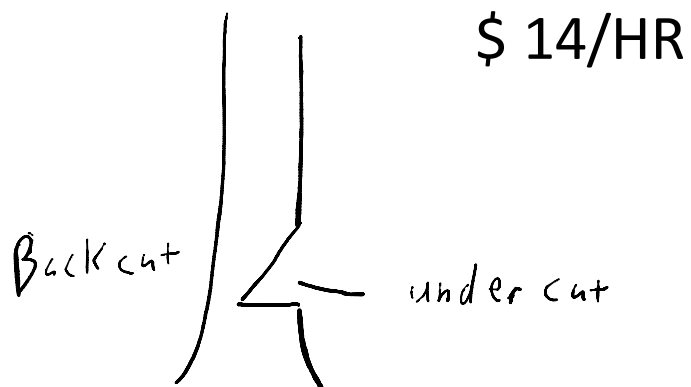


CAREERS

CONSERVATION SCIENTIST - 32,000
SALARIES - 30,000 - 78,000

FOREST & CONSERVATION WORKER -
17,000
\$15,600 - \$39,700

LOGGER - 75,000



FORESTRY TEACHING & RESEARCH

MKTING

Thursday, December 02, 2010
9:12 AM

SUPPLY - AMT OF PROD. AVAILABLE

DEMAND - AMT OF PROD. WANTED

LESS EXPENSIVE THE MORE DEMAND

MORE \$\$ AVAILABLE THE MORE DEMAND

CONSUMERS - THOSE THAT BUY PRODUCTS
IN THE MKT PLACE, YOU NEED TO KNOW
WHO THE CONSUMERS ARE; HOW LARGE IS
THE POPULATION OF CONSUMERS; WHERE
ARE CONSUMERS LOCATED

ADVERTISING

PRODUCT ADVERTISING - FOCUSES ON THE
PRODUCT ITSELF

PRODUCT USEFULNESS; DURABILITY; PRICE;
VALUE; CUSTOMER'S NEED FOR IT

INSTITUTIONAL ADVERTISING - CREATE A
FAVORABLE IMAGE OF FIRM OR BUSINESS
CLAIMS OF FINANCIAL STABILITY;
LONGEVITY; RELIABILITY; INTEGRITY OF
COMPANY & EMPLOYEES

ADVERTISING IS EXPENSIVE

PRODUCERS CONTRIBUTE A SMALL AMT
FOR EACH UNIT SOLD - CHECK-OFF
PROGRAM

WHEAT, RICE, COTTON, TOBACCO,
PEANUTS, BEEF, PORK, MILK

90% OF PRODUCERS CONTRIBUTE TO 300
FED. & STATE PROMOTION PROGRAMS
COVERING 80 COMMODITIES
APPROX. HALF A BILLION \$\$ ANNUALLY

PRICING

PRODUCERS HAVE LITTLE CONTROL DUE TO
PERISHABLE NATURE OF NONPROCESSED
FOODS

PSYCHOLOGICAL PRICING - PEOPLE WILL PAY
\$1.99 AND REJECT PRODUCT AT \$2.00

MULTIPLE ITEMS PRICED TOGETHER - 3 FOR
\$4.00

NATURAL RESOURCES

Wednesday, January 23, 2008
9:05 AM

DEFINITION -

ANY OBJECT, LIVING ORGANISM,
MATERIALS, OR ENERGY SOURCE FOUND
IN NATURE USED BY MANKIND

2.26 BILLION ACRES

TOPSOIL - MOST IMPORTANT

USABLE WATER

USING 300 BILLIONS GAL/DAY
240 BILLION GAL RETURN TO
HYDROLOGIC CYCLE - WATER CYCLE

WATER IS THE UNIVERSAL SOLVENT
WATER SHORTAGE? NO, NOT JUST
WHERE ITS NEEDED.

WILDLIFE

121 VERTEBRATE SPECIES EXTINCT

\$1.1 BILLION FROM LICENSES

FORESTS

NONCOMMERCIAL - 1/3

ENERGY

COAL - DISCOVERED 1673, ILLINOIS
MINERAL RESERVES
EXPLOITATION

PRESERVATION
CONSERVATION

EARLY YEARS

1844 FORM NEW YORK SPORTING CLUB

1865 - 1ST STATE GAME COMMISSION
MASSACHUSETTS

MARKET HUNTERS

48 SPECIES BECOME EXTINCT
HUNTING LICENSE - >\$1 BILLION

LACEY ACT OF 1900

1916 MIGRATORY BIRD TREATY

1918 FEDERAL MIGRATORY BIRD TREATY
ACT

1934 DUCK STAMP ACT

COST \$1 - \$600,000

\$3 - \$6 MILLION

SOILS

NATURAL RESOURCES CONSERVATION
SERVICE - NRCS

FARM SERVICE ADMINISTRATION - FSA

17% CROP PRODUCTION

WEEKS LAW OF 1911

DEATH VALLEY - 282 FT BELOW SEA LEVEL
MT. MCKINLEY - 20,320

2/3 NOT SUITABLE FOR FARMING

8% COVERED BY CITIES, ROADS,
FACTORIES, HOMES

17% USED FOR CROP PRODUCTION

70% COVERED BY WATER

DRINK, WASH, GROW FOOD, CLEAN,
MANUFACTURING, ENERGY

300 BILLION GALLONS/DAY

60 BILLION DEPLETED

240 BILLION RETURNED

ECOSYSTEM - PARTIALLY SELF-CONTAINED
ENVIRONMENTAL & LIVING SYSTEM

ECOLOGY - SCIENCE - STUDY OF
INTERACTIONS OF ORGANISMS & THEIR
ENVIRONMENT

ECOLOGIST - CONCERNS THEMSELVES
WITH WHAT IS KNOWN & IS OBSERVED

SCIENCE IS AMORAL

PRODUCERS - GREEN PLANTS

TRANSFORMER - CHANGES SUGARS (FROM
PRODUCERS) INTO MORE COMPLEX
SUBSTANCES

DECOMPOSERS - BREAK DOWN ORGANIC
MATERIAL FOR RE-USE

"ULTIMATE CONCEPT OF ECOLOGY"

NONEXHAUSTIBLE RESOURCES -
WATER, AIR, SOLAR

RENEWABLE RESOURCES -
PLANTS, FISH, WILDLIFE

EXHAUSTIBLE RESOURCES -
OIL, MINERALS, SOIL, COAL

BIOME -

FOOD WEB

POPULATION
CARRYING CAPACITY

HUMAN POPULATION
6000 BC - 10 MILLION
1000 AD - 310 MILLION

1250	400 MILLION
1500	500 MILLION
1900	1.65 BILLION
2000	6.06 BILLION
2100	11.2 BILLION

CONSERVATION - MGT
PRESERVATION - LIBERTY BELL

MULTI-USE

CCC

WATER SUPPLY & USERS

Monday, February 11, 2008
9:30 AM

HYDROLOGIC CYCLE

PRECIPITATION

SNOW, SLEET, RAIN, HAIL,

EVAPORATION

EVAP, SUBLIMATION, TRANSPIRATION

SURFACE

GROUNDWATER

WATER USERS

AG

INDUSTRY

HYDROELECTRIC

FISH & WILDLIFE

RECREATIONAL USERS

DOMESTIC USERS

IRRIGATION

FLOOD

FURROW

SEMI-PORTABLE
PORTABLE

INDUSTRY

40 BILLION GAL/DAY

DOMESTIC USERS

U.S. EACH PERSON USES APPROX. 173
GAL/DAY

BATH 30 - 40 GAL.

SHOWER 2.5 - 5 GAL/MIN

TOILET 1.5 - 3 GAL/FLUSH

WASHING MACHINE 30 GAL/LOAD

POLLUTION -

POINT SOURCE

NON-POINT SOURCE

MAJOR

LEAD

MERCURY

ASBESTOS

FRIABLE

NON-FRIABLE

URBAN POLLUTION

SEWAGE

EXHAUST

FERTILIZER

ROAD SALT

DUST

INDUSTRIAL POLLUTION

SMOKE

THERMAL - HEAT

RADIOACTIVE

ORGANIC - BOD TEST

INORGANIC

AGRICULTURAL POLLUTION

EUTROPHICATION

TOLERANCE?

GROUP 1: POLLUTION INTOLERANT

1. STONEFLY

2. CADDISFLY
3. WATER PENNY
4. RIFFLE BEETLE
5. MAYFLY
6. GILLED SNAILS

GROUP 2: SOMEWHAT TOLERANT

1. DOBSONFLY (HELLGRAMMITE)
2. CRAYFISH
3. SOWBUG
4. SCUD
5. ALDERFLY LARVA
6. FISHFLY LARVA
7. DAMSELFLY
8. WATERSNIPE FLY LARVA
9. CRANE FLY
10. BEETLE LARVA
11. DRAGONFLY
12. CLAM

POLLUTION TOLERANT

1. AQUATIC WORMS
2. MIDGE FLY LARVA
3. BLACKFLY LARVA

4. LEECH
5. POUCH SNAIL & POND SNAILS
6. OTHER SNAILS

HUMAN WATER CYCLE

WATER - PURIFY - USER - TREATMENT

332,000,000 CUBIC MILES

700 CUBIC MILES HUMAN USE

36 CUBIC MILES DOMESTIC USER

.0003% NATURAL WATER CYCLE

OR .0000001% TOTAL WATER SUPPLY

PURE WATER

IN SOLUTION

IN SUSPENSION

3 CONDITIONS FOR DANGEROUS WATER

UNDESIREABLE COLOR

UNDESIREABLE ODOR

UNDESIREABLE pH

pH <7 CORROSIVE

>7 CORROSIVE & SCALE DEPOSITS

IMPURITIES

RUST - FERROUS OXIDATION
IRON & MANGANESE

HARD WATER - CA & MG

BIOLOGICAL

MAMMALS TO VIRUSES
ALGAE

TURBIDITY - SOLIDS SUSPENDED IN
LIQUID SEECHI TEST

SEWAGE WASTE

SEPTIC TANK

SEWAGE TREATMENT PLANT

PRIMARY TREATMENT - MECHANICAL

SECONDARY TREATMENT -

BIOLOGICAL

AEROBIC & ANAEROBIC

TERTIARY TREATMENT - CHEMICAL

WATER USE

DESALINATION - REMOVING SALT

MEMBRANE PROCESS

REVERSE OSMOSIS

ELECTRODIALYSIS

DISTILLATION

CHANGING THE WEATHER

MAKE IT RAIN - SILVER IODIDE

MAKE IT SNOW -

ATMOSPHERE

78% NITROGEN

21% OXYGEN

1% OTHER GASE

ARGON, CARBON DIOXIDE,

OZONE, HELIUM, WATER VAPOR

TROPOSPHERE

4 MILES OVER POLES

17 MILES OVER EQUATOR

WEATHER OCCURS HERE

STRATOSPHERE

OZONE - HOLE
METHANE - LIVESTOCK
LEAD - GASOLINE
SULFUR - VOLCANOES - COAL

GREENHOUSE EFFECT

CAREERS

GEOSCIENTIST
GEOLOGIST
GEOPHYSICIST
HYDROLOGIST
OCEANOGRAPHER
METEOROLOGIST
WATER & WASTE TREATMENT
OPERATORS

INVASIVE SPECIES -
ZEBRA MUSSLES
EURASIAN MILFOIL

CH. 13

Wednesday, March 12, 2008

9:08 AM

INSECTS	INSECTICIDES
MITES	MITICIDES, ACARICIDES
BIRDS	AVICIDES

PATHOGENS

ALLELOPATHY

ANNUAL PLANT

BIENNIAL

PERENNIAL

RHIZOMES - UNDERGROUND

HORIZONTAL STEM

STOLON - ABOVEGROUND

HORIZONTAL STEM

METAMORPHOSIS

PLANT DISEASES

VFN

Bt - BACILLUS THURINGENSIS

ECONOMIC THRESHOLD

GMO

WILDLIFE #1

Tuesday, April 08, 2008
10:58 AM

2300 VERTIBRATE SPECIES

HABITAT

CARRY CAPACITY

POPULATION

RARE, THREATENED, ENDANGERED, EXTINCT

PASSENGER PIGEON - DID NOT BREED IN
CAPTIVITY

CAROLINA PARAKEET - FEATHERS

HEATH HEN - FIRE IN SANTUARY

LABRADOR DUCK - STUFF PILLOWS

ENDANGERED SPECIES

BIGHORN SHEEP

HUMAN

DISEASES

POLAR BEARS

LOOSING HABITAT

SLOW REPROD. RATES

KEY DEER
AREA
DEER-CAR ACCIDENTS

WOLVES

PUMA

WHOOPIING CRANE
188

BALD EAGLES
BOUNTY
DDT
1963 - 417 PAIRS
TODAY - 5748 PAIRS

IVORY BILLED WOODPECKER

PRAIRIE CHICKENS

ENDANGERED FISH

HABITAT

FOOD

HERBIVORE - PLANTS

CARNIVORE - MEAT

INSECTIVORE - INSECTS

FRUGIVORE - FRUITS

OMNIVORE - VARIETY

SPERMIVORE - SEEDS

EURYPHAGOUS - VAST QUANTITY

STENOPHAGOUS - SPECIALIZED DIET

COVER - SHELTER OR HIDE

HOME RANGE VS. TERRITORY

GAME MANAGEMENT

GAME REFUGE

HABITAT DEVELOPMENT

WORK W/ OTHER RESOURCES

HUNTING REGS

PREDATOR CONTROL

ARTIFICIAL STOCKING

MIDNIGHT STOCKING POPULATION VS. CAPACITY

LEGISLATION

LACEY ACT OF 1900

MIGRATORY BIRD ACT OF 1929

MIGRATORY BIRD HUNTING STAMP
ACT OF 1934

PITTMAN-ROBERTSON AND DINGELL-
JOHNSON ACT OF 1950

LEA ACT OF 1948

ENDANGERED SPECIES ACT OF 1996

MARINE FISHERIES

ZONES

SUPRATIDAL - ABOVE HIGH TIDE

INTERTIDAL - LITTORAL ZONE -

BETWEEN HIGH & LOW TIDE

NERITIC ZONE

BATHYAL ZONE

ABYSSAL ZONE

EUPHOTIC ZONE - SUNLIGHT

THERMOCLINE

SALINITY - PARTS PER THOUSAND

33 ‰ TO 38‰

OR 3.3% TO 3.8%

CURRENTS

INTERNAL WAVE

CATASTROPHIC WAVE

TIDAL WAVE

PLANKTON

SALMON

TUNA

MENHADEN

FLOUNDER

SHRIMP

PENEID SHRIMP

US, INDIA, JAPAN

OYSTERS

BABY OYSTER - SPAT

CRABS - 4,500 DIFFERENT SPECIES

LOBSTER

MANAGEMENT HABITAT
LAKE
POND

FISH SAMPLING
SHOCKING
ROTENONE
CREEL SURVEYS

CAREERS
CONSERVATION OFFICERS
WILDLIFE BIOLOGIST
FISH & WILDLIFE TECHNICIAN
FISH CULTURE TECHNICIAN
ZOOLOGIST

TAXONOMY -
BINOMIAL SYSTEM - LINNEAOUS

GENUS species

BEHAVIORS & HABITS

FLIGHT ZONE

STRUCTURE

BONE

JAW/TEETH

FEET/LEGS

STOMACHS

RUMINANTS

SIMPLE STOMACH

BIRDS - CROPS, GIZZARDS

GROWTH -

CELL DIVISION - MITOSIS

REPRODUCTION -

MEIOSIS

RECREATION ON PUBLIC LANDS & WATER

BLM - 262 MILLION ACRES

NAT'L PARK SERVICE - 86 MILLION ACRES

FISH & WILDLIFE SERVICE - 94 MILLION
ACRES

BUREAU OF INDIAN AFFAIRS - 56 MILLION
ACRES

BUREAU OF RECLAMATION - 9 MILLION
ACRES

DEPARTMENT OF AGRICULTURE, FORESTRY
SERVICE - 192 MILLION ACRES

OUTDOOR RECREATION

CAMPING

HORSE BACK RIDING

TUBING DOWN A RIVER

TUBING BEHIND A BOAT

FISHING

CANOEING

ROCK CLIMBING

HAND GLIDING

ZIP LINING

SITTING AROUND A CAMP FIRE
RAFTING
HIKING
FOUR WHEELING
JOGGING/RUNNING
WATER SKIING
SNOW SKIING
SLEDDING
SURFING
WATER PARKS
BIRD WATCHING
STAR GAZING
ARCHERY
SWIMMING
CAMP FIRE COOKING
BICYCLING
GOLFING
BEACH VOLLEYBALL
PAINT BALLING
GO KARTING
TRAPPING
HUNTING
SNOW MOBILING
SKATE BOARDING

GEO CACHING

OUTDOOR SAFETY

DNR

EDUCATION

SMOKEY BEAR

EDDIE EAGLE

GUN SAFETY

HUNTER EDUCATION

BOATING SAFETY

ATV SAFETY

WOMEN IN THE OUTDOORS

ARCHERY

SNOWMOBILING

WATER ACTIVITIES

BOATING

OUTDOOR CAREERS

PARK RANGER

GUIDE - FISHING/HUNTING/HIKING

PRIVATE BUSINESSES

PHOTOGRAPHY

BAIT SHOPS

CAMPGROUNDS

YOUTH CAMPS

ADVANCED CONCEPTS

Wednesday, May 12, 2010
9:11 AM

MANAGEMENT

EXPLOITATIONISTS

DEVELOPERS

CONSERVATIONISTS

PRESERVATIONISTS

TINSTAAFL PARADOX - THERE IS NO SUCH
THING AS A FREE LUNCH

ANTHROPOCENTRIC - HUMAN CENTERED

THE 3 Es

ECOLOGY - ECOLOGICALLY FEASIBLE

ECONOMICS - ECONOMICALLY FEASIBLE

SOCIALLY, CULTURALLY, & POLITICALLY

FEASIBLE - EMOTIONAL