## FROM BACKPACKS TO JETPACKS HAND PICKS TO SKIDSTEERS

LEVERAGING OLD TOOLS AND NEW TECHNIQUES FOR LONG TERM SUCCESS



#### THE ETERNAL QUESTION:

#### DUDE, WHERE IS YOUR JETPACK?

## DREAM OR REALITY?



#### IF NOT JETPACKS.....

#### IS THERE NEW OR OLD TECHNOLOGY FOR MORE EFFECTIVE, LARGE SCALE WEED MANAGEMENT?????

#### PROBABLY

#### WHERE DO WE LOOK?

# WHO ELSE WORKS WITH A LOT OF WEEDS IN LARGE SCALES AND IN REMOTE AREAS? FORESTRY

AGRICULTURE LANDSCAPE CONSTRUCTION

#### THERE ARE A LOT OF WEEDS

JUST FACE IT

#### CAN WE HAND PICK THEM ALL?



#### OR COULD WE DREAM OF A BETTER WAY?



## ROBOT SUIT – HYDRAULIC ASSISTED HAND WEEDING!





# BEFORE WE DREAM TOO FAR INTO THE FUTURE – HOW ABOUT LOOKING TO OUR PAST?

100 YEARS OF BIG AG AND FORESTRY CHANGED THE LANDSCAPE OF NORTH AMERICA ARE WE STILL USING ANY OF THESE TOOLS?

## FORESTRY



### STEAM POWER AND PEOPLE TORE APART OUR NATURAL WORLD 100 YEARS AGO



#### COULD THE SAME TECHNOLOGY BE USED TO PUT IT BACK TOGETHER?

#### NO HERBICIDE – ONLY DYNAMITE



#### SAME PLAYERS – DIFFERENT TIME



### PEOPLE HAVE BEEN REPLACED BY MACHINES IN NEARLY ALL PHASES OF MODERN LOGGING



#### HARVESTERS CUT AND BUCK

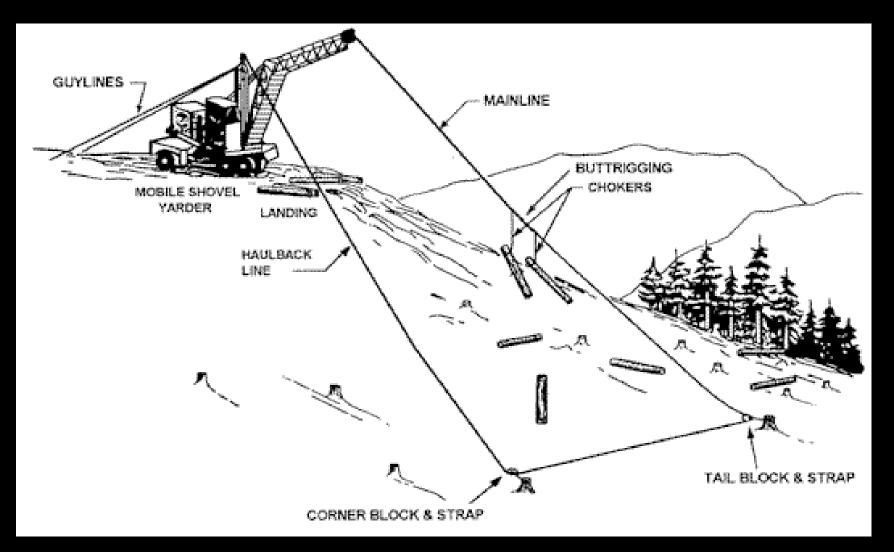




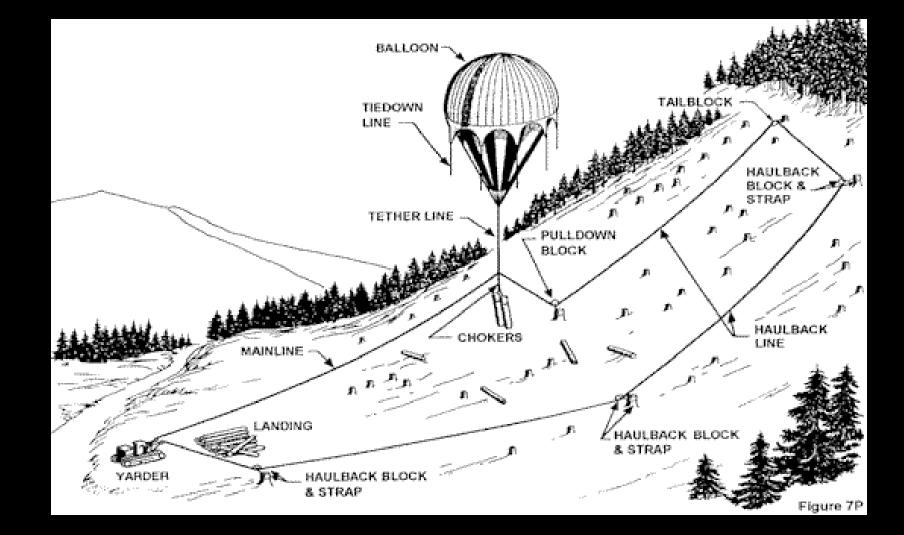
#### YARDERS SKID AND LOAD



#### ELABORATE CABLE SYSTEMS USED FOR LOG EXTRACTION



#### HOT AIR BALOONS!



#### MULCHING TRACTORS CLEAN-UP SLASH BEFORE PLANTING



## TECHNOLOGY IS TRICKLING DOWN

#### MANY OF THESE TOOLS CAN BE TWEAKED FOR WEED MANAGEMENT

#### SMALLER SKIDSTEER MULCHERS NOW AVAILABLE



#### MINI-MULCHING HEAD



## TREE TO MULCH – IN PLACE -< 5 MINUTES



### WIDELY USED FOR GORSE/BROOM REMOVAL IN AUS/NZ



### GORSE FIELD - BEFORE



### GORSE FIELD – AFTER 2 HOURS



#### STEEP SLOPES ARE ALWAYS A PROBLEM



### MODERN MACHINES CAN WORK ON UP TO 100% SLOPES



#### SPIDER (WALKING) EXCAVATORS ARE COMMON EVERYWHERE EXCEPT THE UNITED STATES



#### CAN BE USED FOR VEGETATION MANAGEMENT



## MULCHING HEAD FOR SCOTCH BROOM ON SLOPES



#### MATERIAL HANDLING



#### THERE HAS TO BE A BETTER WAY



#### CONVEYOR BELTS AT CONSTUCTION SITES



## MOBILE INDUSTRIAL SYSTEMS FOR MINES – PROCESSING PLANTS



#### NEW LIGHTWEIGHT MOBILE SYSTEMS FOR WILDLAND WORK





MANY CONVEYOR SYSTEMS CAN NOW EVEN BE RENTED TO REDUCE PRICEPOINT EVEN FURTHER

#### CAN WE DREAM OF GOING FURTHER?



#### WHAT THE?



## UAV'S NOT JUST FOR THE MILITARY ANYMORE



#### YAMAHA'S RMAX RC HELICOPTER AGRICULTURAL SPRAYER



## OVER 1,600 CURRENTLY USED IN JAPAN/KOREA PEST CONTROL TODAY



### PAYLOAD EQUIVELANT TO AN ATV SPRAYER AND CAN GO ANYWHERE



# MORE MODEST OPTIONS AVAILABLE



# CURRENT US COMERCIAL PRODUCTS CURRENTLY LIMITED TO AERIAL PHOTOGRAPHY



# PRECISION AG USE FOR AERIAL PHOTOGRAPHY



# SO I WOULD LIKE TO ENCOURAGE YOU TO DREAM A LITTLE

HALF-BAKED IDEAS CONTINUE TO CHANGE THE WORLD

### ONCE THESE WERE SOMEONE'S CRAZY IDEA



#### WE NEED MORE DREAMERS

ENGINEERS, ARTISTS, SCIENTISTS, BUSINESS PEOPLE TO DEVELOP AN ECONOMY FOR WEED WORK WITH MORE COOL TOOLS, WE CREATE MORE COOL JOBS, AND THEN WE GET WAY MORE DONE!

# AND IF YOU CAN'T CREATE – BELIEVE!

# AGENCY STAFF, MANAGERS, REGULATORS, BOARD MEMBERS

WE NEED YOUR SUPPORT TO TEST NEW IDEAS – OTHERWISE WE ARE JUST CRAZIES WITH IDEAS

#### AND ONLY THEN WE CAN KEEP GOING HIGHER AND HIGHER

