



CHEYENNE  
BOTANIC  
GARDENS

# Cheyenne - - An odd place to put a city

No large body of water

No river

No usable natural resource



# Cheyenne - - A tough place to garden

- #1 for hail nationally



## Cheyenne - - A tough place to garden

- #1 for hail nationally
- #4 for wind in the lower 48 states



# **BALLOON HANDLING TIPS FOR *WINDY* DAYS!**

1. Hold bouquets **CLOSE** to your body.
2. Load and unload vehicles facing into the wind.
3. Mylar (foil) balloons: hold directly onto the tail of each one so they do not come off the ribbon.
4. Dust and other items loose in the wind can easily pop balloons.
5. Place your hand up close to the neck of the balloon bouquet.

Any balloon can pop at any time. Due to conditions beyond our control, Party America cannot be responsible for popped, damaged or lost balloons once they leave our store.

## Cheyenne - A tough place to garden

- #1 for hail nationally
- #4 for wind in the lower 48 states
- Very little winter snow cover



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- Cool summer nights make slow plant growth



## Cheyenne - A tough place to garden

- #1 for hail nationally
- #4 for wind in the lower 48 states
- Very little winter snow cover
- Cool summer nights make slow plant growth
- Unpredictable spring and fall frosts

Cheyenne Botanic Gardens  
September 13th





# Cheyenne Botanic Gardens September 14th



Bloom where you  
are planted

An odd way to start a botanic garden



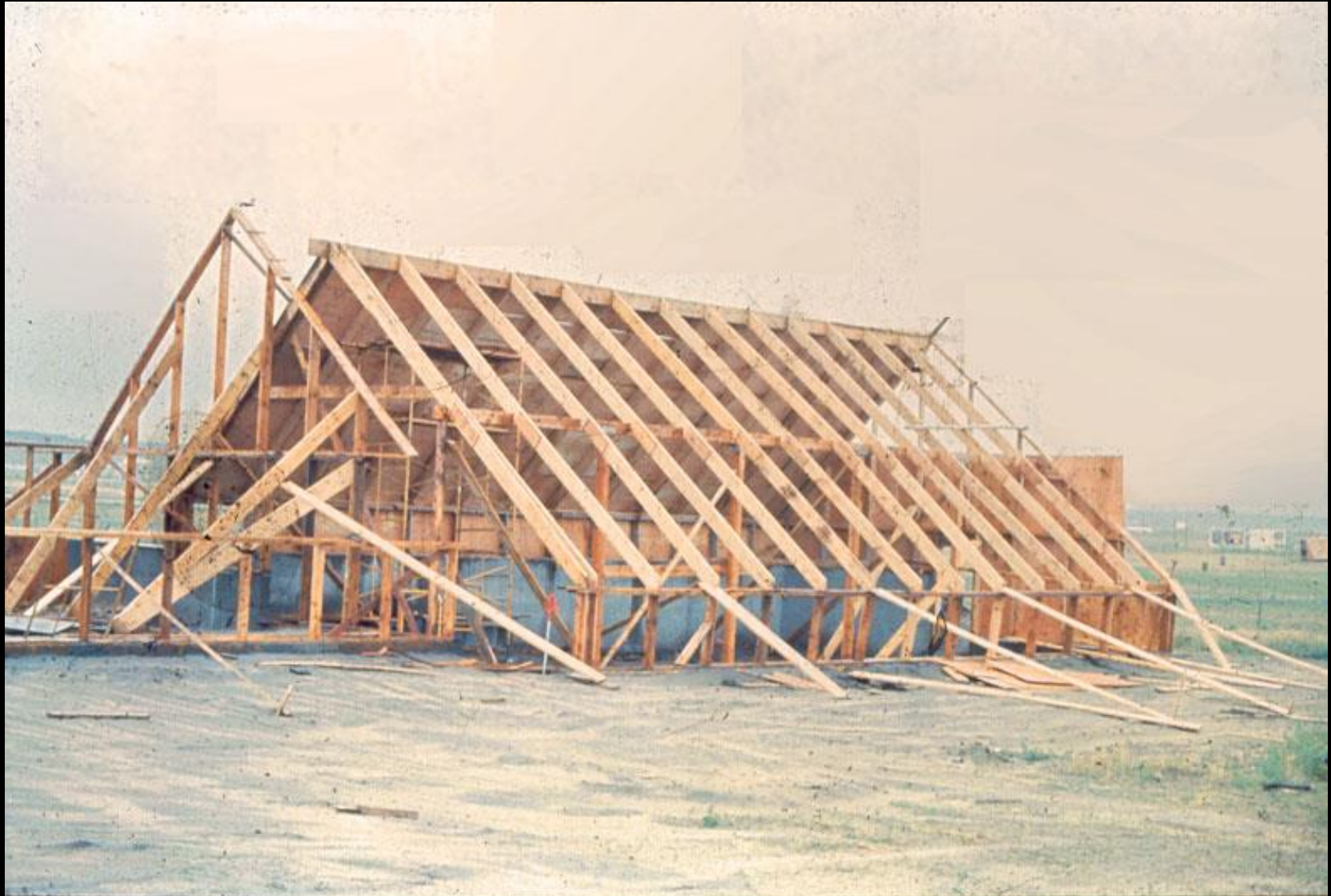
Starting small is good



# Hand-built solar conservatory



Don't always believe the experts





With volunteers all things are possible

## Hand-built solar conservatory



Hand-built solar conservatory



With volunteers all things are possible



Hand-built solar conservatory



Donations can be good . .  
or not so good





1977















Seniors are an  
underutilized resource





Make horticulture  
therapy meaningful







Be resourceful





Innovate with what you have





Change doesn't  
happen overnight



Confront your fears





Youth are an underutilized resource





Mixing people of different ages,  
backgrounds and perspectives enriches us all







Be willing to experiment



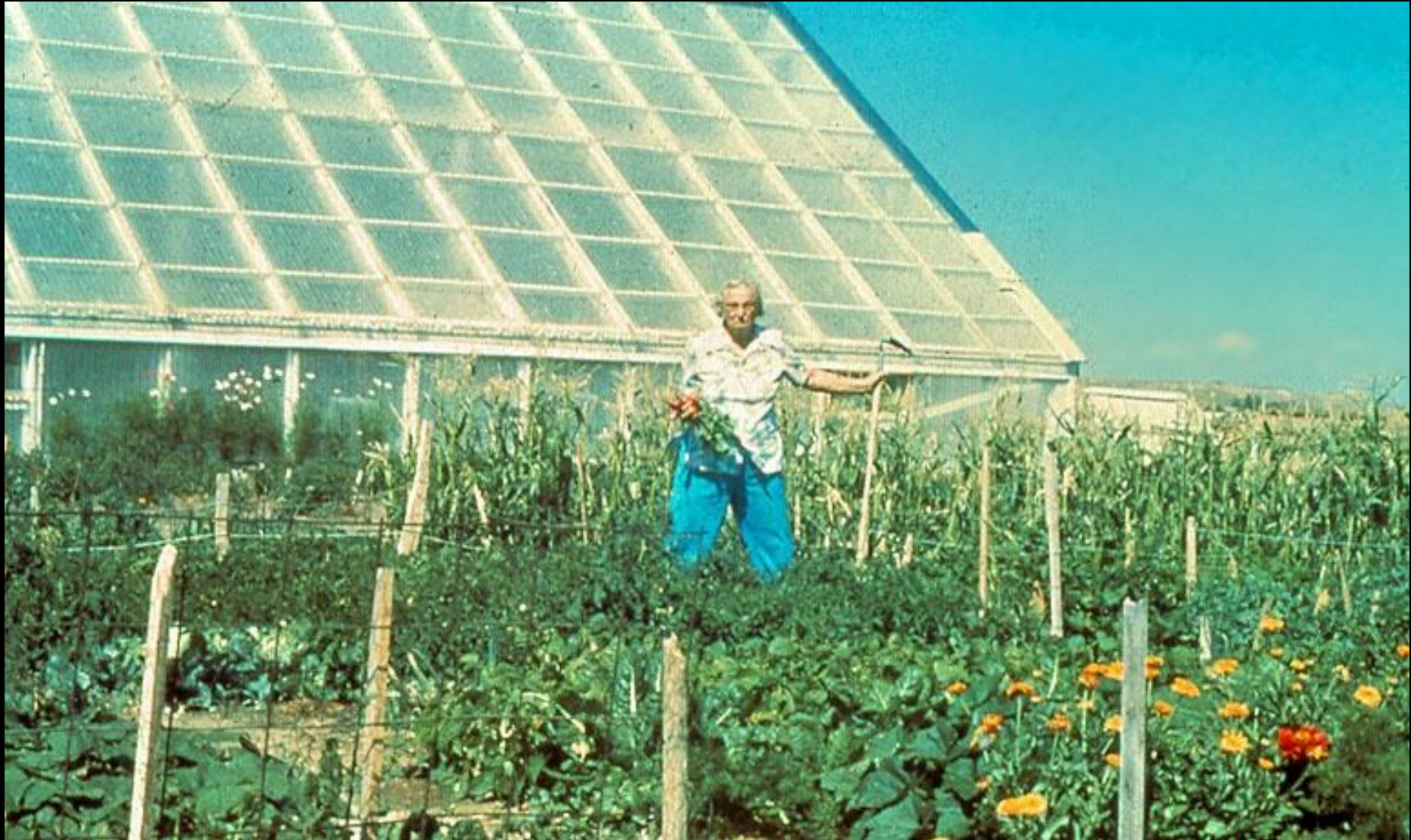








## Community Gardens



Wyoming's first modern community garden 1978



Diversity enhances everything



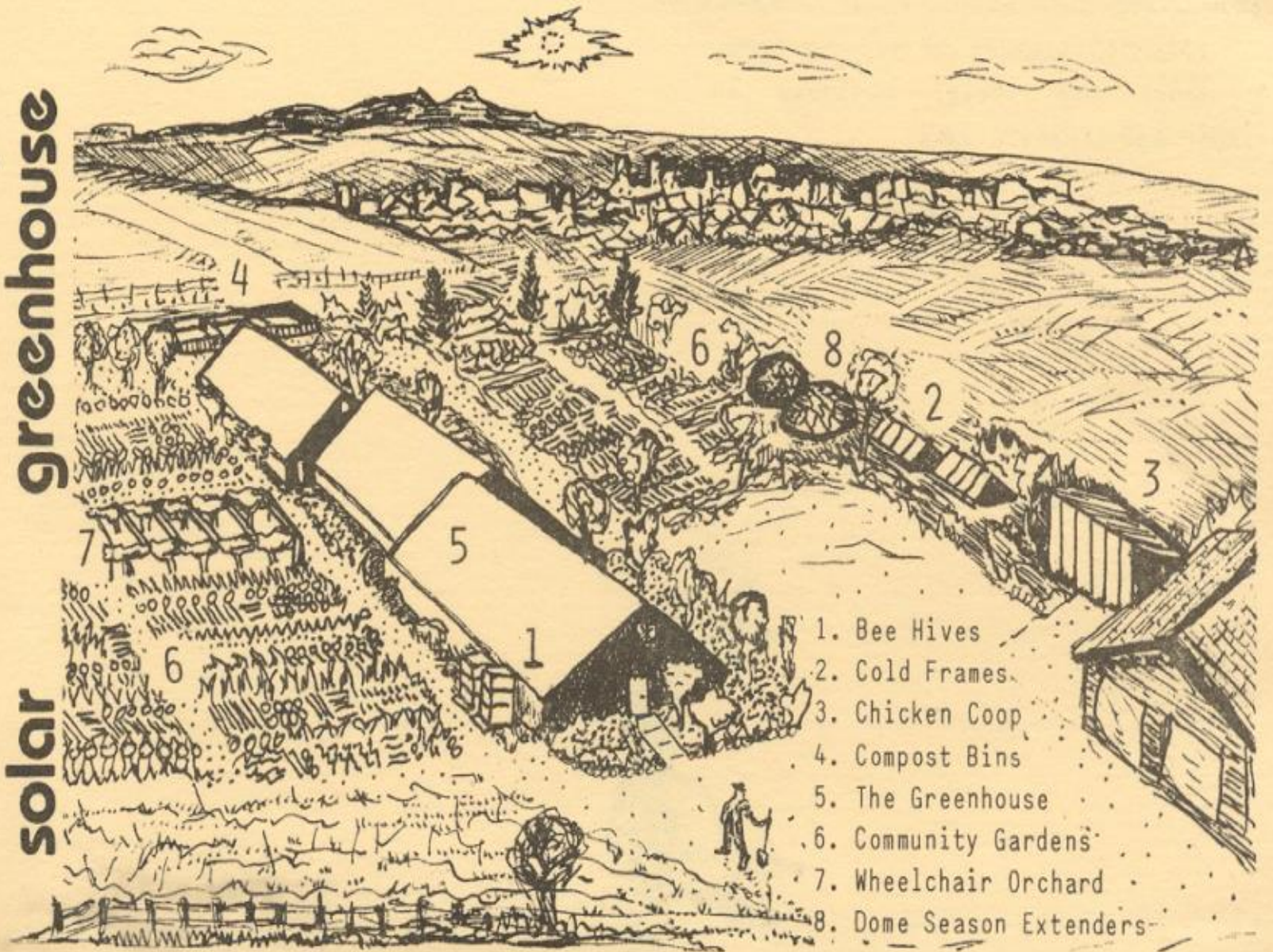
## Wyoming's first Farmers' Market 1980



Create economic  
opportunity



**cheyenne community solar greenhouse**



1. Bee Hives
2. Cold Frames
3. Chicken Coop
4. Compost Bins
5. The Greenhouse
6. Community Gardens
7. Wheelchair Orchard
8. Dome Season Extenders

Cheyenne Community Solar Greenhouse  
1977 - 1986



Q. What can 20 senior citizens do politically?

A. Get a unanimous vote for approval  
of a \$450,000 grant





New name: Cheyenne Botanic Gardens 1986 moved to Lions Park



You have to be a salesman

You have to be a salesman

You have to get political

You have to be a salesman

You have to get political

You have to be careful

## CHANGES . . . . .

- 1977** - Cheyenne Community Solar Greenhouse built and opened
- 1978** - Started the State of Wyoming's first community garden since WWII era.
- 1980** - The Cheyenne Botanic Gardens starts Wyoming's first farmers' market.
- 1984** - Constructed the first wheelchair accessible orchard.
- 1985** - \$395,000 Community Development Grant funds a new Botanic Garden structure in Lions Park.
- 1986** - Construction of the new structure is completed and the Botanic Gardens becomes a division of the City of Cheyenne Parks and Recreation Department
- 1993** - Gardens non-profit Foundation formed
- 1996** - Peace Garden dedicated
- 1996** - First Botanic Garden to have Photovoltaic solar electricity
- 1997** - Master Plan created that envisioned future gardens
- 2000** - Rotary Century Plazas completed
- 2004** - Rose Garden completed and opened
- 2005** - Herb Garden completed and opened
- 2006** - Garden Labyrinth dedicated
- 2008** - 62 acres of the USDA Research Station transferred to Gardens
- 2008** - Cheyenne Botanic Gardens on ballot for \$750,000 fPassed by 62%
- 2009** - First ever "LEED certified" (platinum) public children's garden opens.
- 2012** - Renovation and Expansion on ballot for \$16,000,000 and passes by 56%
- 2012** - All parts of master plan are completed except for new Grand Conservatry
- 2017** - \$20 million Grand Conservatory Opens to the public



































# 1997 Master Plan

The community provided most of the input



Good planning will drive your future







Dr. Walter C. Buehling  
HERB GARDEN







1997



Renewable energy teaches, and saves \$

## Photovoltaic Solar: Providing 50% of the electricity needs





Sometimes you don't  
have to spend money







Community Gardening -  
**BIGGER** than you  
think!





# Rotary Century Plazas



Connect the city dwellers  
with the agriculture  
community

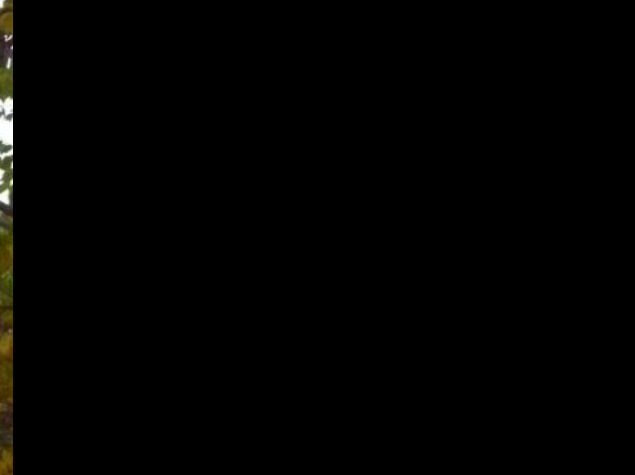


Western Walkway to the Century Plazas





Mrs. Nannie Steele reported that in 1876 nine years after the town was established there were only 12 trees in Cheyenne. The next year, however, Major John Talbot ordered 20,000 young trees and willow cuttings from Nebraska for planting in the vicinity of Cheyenne.



## Today's Common Styles of Horseshoes

### SKY TRAIL Sculpture

**RICK UPPHAM**

After researching thousands of horseshoes from the Great Basin areas, the Gardner selected metal artist Rick Uppham to create the archway. According to Uppham, the archway is a nod to the early cattle drives from Texas to Wyoming. It also served as a means of warding off evil spirits from the rough and rugged horseshoes. Uppham placed small metal weather in the top of the sculpture, which in the right wind, creates an eerie sound.

Black horses often will be the leader and will also be the last horse in the line. The horses that are in the middle are the most important.

Chapman Adams Gardner (1900-1980) Artist

### Is a horseshoe lucky?

Horseshoes are considered the most universal of all the good luck charms. A common tradition is that if a horseshoe is hung above a door with the two ends pointing up then good luck will occur. However, if the two ends point downwards then bad luck will occur.

### How old is the Horseshoe?

The horseshoe was introduced to western culture by the Greeks in the 4th century. It became a mainstream practice in Europe around 1000 AD. Horses and mules contributed a vital part to the development of America, especially in settling the West. Once people discovered the utilitarian value of the horse, they realized they needed to protect the horse's feet.

### What is a horseshoe?

A horseshoe is a U-shaped piece of iron, rubber, plastic, rawhide or laminated, nailed or glued to a horse's hoof and some other draft animals — like a shoe. They are used to protect the animal's hooves from wear and tear. Horseshoes are available in a wide variety of materials and styles, developed for different types of horses and the work they do. Some special shoes are made from magnesium, titanium or copper.

There are even specially designed shoes for the popular game of Horseshoes.

A common point about horseshoes is if you have:

Some make claim NOTE: the longer heels will fit better.

Lightweight aluminum being popular for trail horses.

Rubber horseshoes which absorb shock.

Wear the point of a nail, the shoe will last longer. For the point of a nail, the shoe will last longer. For the point of a nail, the shoe will last longer.

Chisel in the game of Horseshoes.

### The Ever Important Nail

Of course, the horseshoe can't do its job without being properly attached with horseshoe nails. For almost 1000 years horseshoers, often called "hoopers," had to make their own nails in the nail-making trade-making horseshoe nails.

The horseshoe nail has a tapered point, blade or chisel, heel, head, and the crest or lip. The head and point are bent the same way in a nail, which runs into the hoof wall and later extends and wedges the nail, to be turned down and flattened. Making horseshoes requires eight nails, four on each side.

As long as most resident can remember Peanut Pond was only 1 foot deep and covered in algae and weeds.





August 2000 –

Use youth to develop interpretation for the wetland and pond.

Provide 6th grade classes from 7 different schools with the tools to develop interpretive signs, postcards and a website for Discovery Pond and to provide a foundation for future classroom activities and mentorship.



Spring 2001  
planting begins



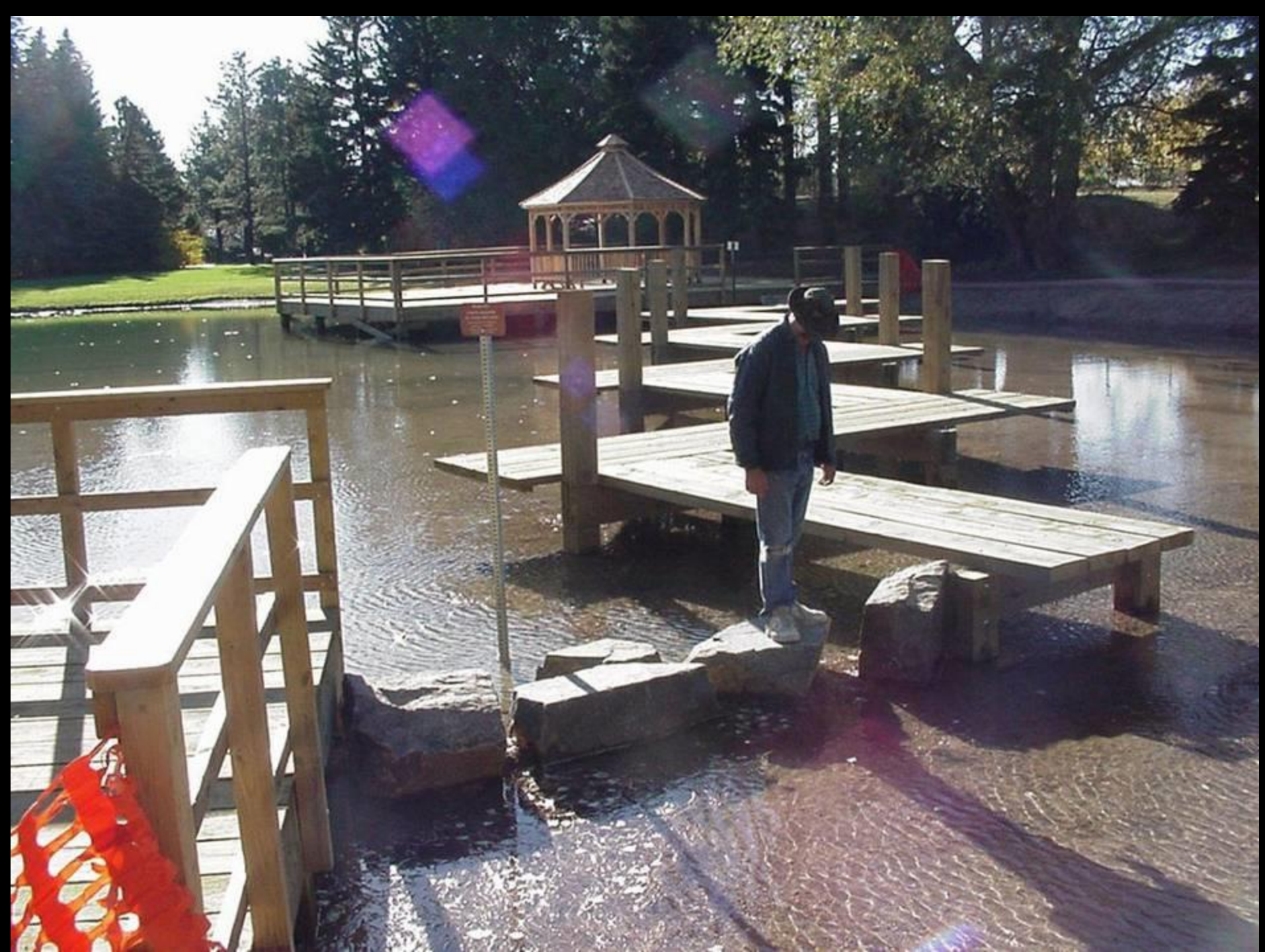
**Build ownership  
whenever possible**











# DISCOVERY POND

## WETLANDS WORK FOR YOU!

This project was made possible by an anonymous donation, funding from Laramie County School-to-Careers and a Wyoming Game and Fish Worth the Watching grant.



**WYOMING'S WILDLIFE**  
*Worth the Watching*



Wetlands lessen the impact of floods by spreading runoff water out over a large area and allowing it more time to soak in.  
Wetland plants filter out sediments and pollutants. They reduce nitrogen and phosphorus and they store carbon.  
Wetlands recharge groundwater supplies by trapping water and slowly releasing it to underground aquifers.  
Wetlands provide food, water or shelter for over 80% of Wyoming's wildlife.  
Wetlands plants anchor the soil and prevent erosion.

Special thanks to Wyoming Game and Fish, Jim and Carol Becker, Boy Scout Troop 116, Bob Bradshaw, Cheyenne City Council, Cheyenne Botanic Garden volunteers, Cheyenne High Plains Audubon Society, Dave Bomer and Rick Parish of Cheyenne Parks and Recreation, Robert D. Clary P.E., Lois Deaver, Bob Dorn, Walt Fertig, Herb Schauf of EDAY, Laramie County Conservation District, Laramie County School District Number One, Laramie County School District Number Two, Leonard Couch of QBC Construction, Debbie Mathew, Mayor Jack Spilker, David Riney, Mead Lambert, Natural Resource Conservation Service, Michelle Zitek, U.S. Fish and Wildlife, the Friends of the Botanic Gardens Foundation, students, teachers and all those who helped make Discovery Pond an educational and beautiful landscape.

Interpretive bronze wetland signs and postcards were designed by local sixth grade students from Albin, Alta Vista, Carpenter, Churchill, Jessup, Pine Bluffs and West Burns elementary schools.



Summer 2001





### Roots Beneath Your Boots


Wetland plant roots are like little hands. They hold the soil in place to prevent erosion. When the wetland floods, the plant roots hold onto the soil. When the water washes away the soil stays behind.



### Soaking It Up

Do you know one of the best natural resources? Wetlands! They help prevent floods by storing water until the rivers need it back. Wetlands are like sponges. They soak up the extra water.

## Filling the Well

A diagram of a well. At the top is a trapezoidal roof. Below the roof is a horizontal bar with a pulley in the center. A rope goes from the pulley down to a bucket hanging in the well. The well is supported by two vertical posts on either side of the central shaft.

Wetlands recharge  
our wells.  
It is really  
quite swell!  
Water is brought  
up from the ground,  
so we can  
gulp it down.

A large, light-colored metal sign shaped like a dragonfly is mounted on a black post. The sign's body is a dark, textured oval containing a poem. The wings are spread out to the sides, and the tail is at the bottom. The background is a muddy pond with some green grass.

I  
dreamed  
I was a  
dragonfly,  
hovering over  
a lily pad.  
I snatch a  
mosquito  
for my lunch.  
Satisfied.



Instant  
Space

Day Old  
Grass

Can  
-o- Air

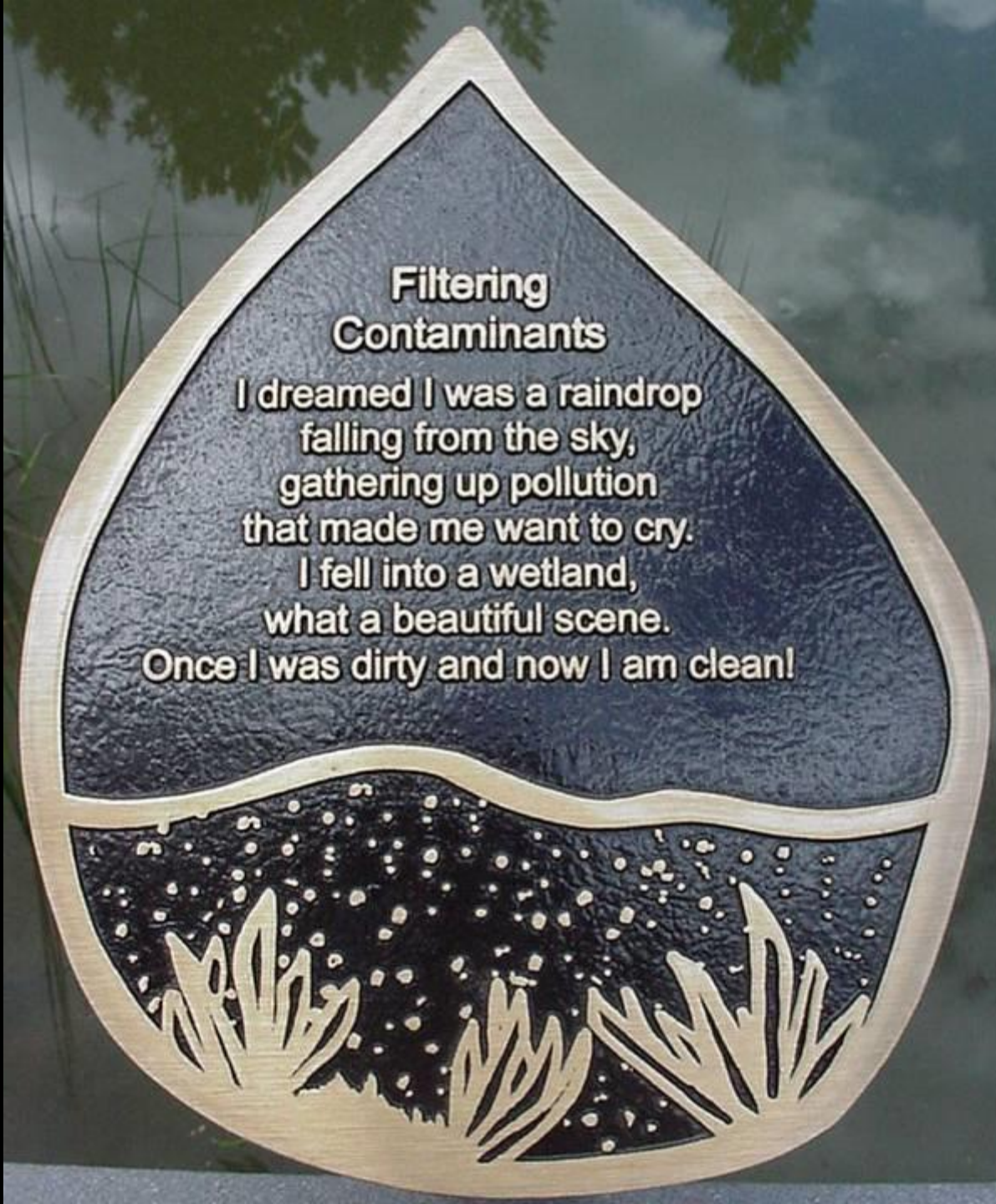
Worm  
-o-  
Meal

Bugs  
-n-  
Grubs

**Biological Supermarkets**  
Wetlands provide food, water  
and shelter for over 80% of  
Wyoming's wildlife!

Micro-Munchies

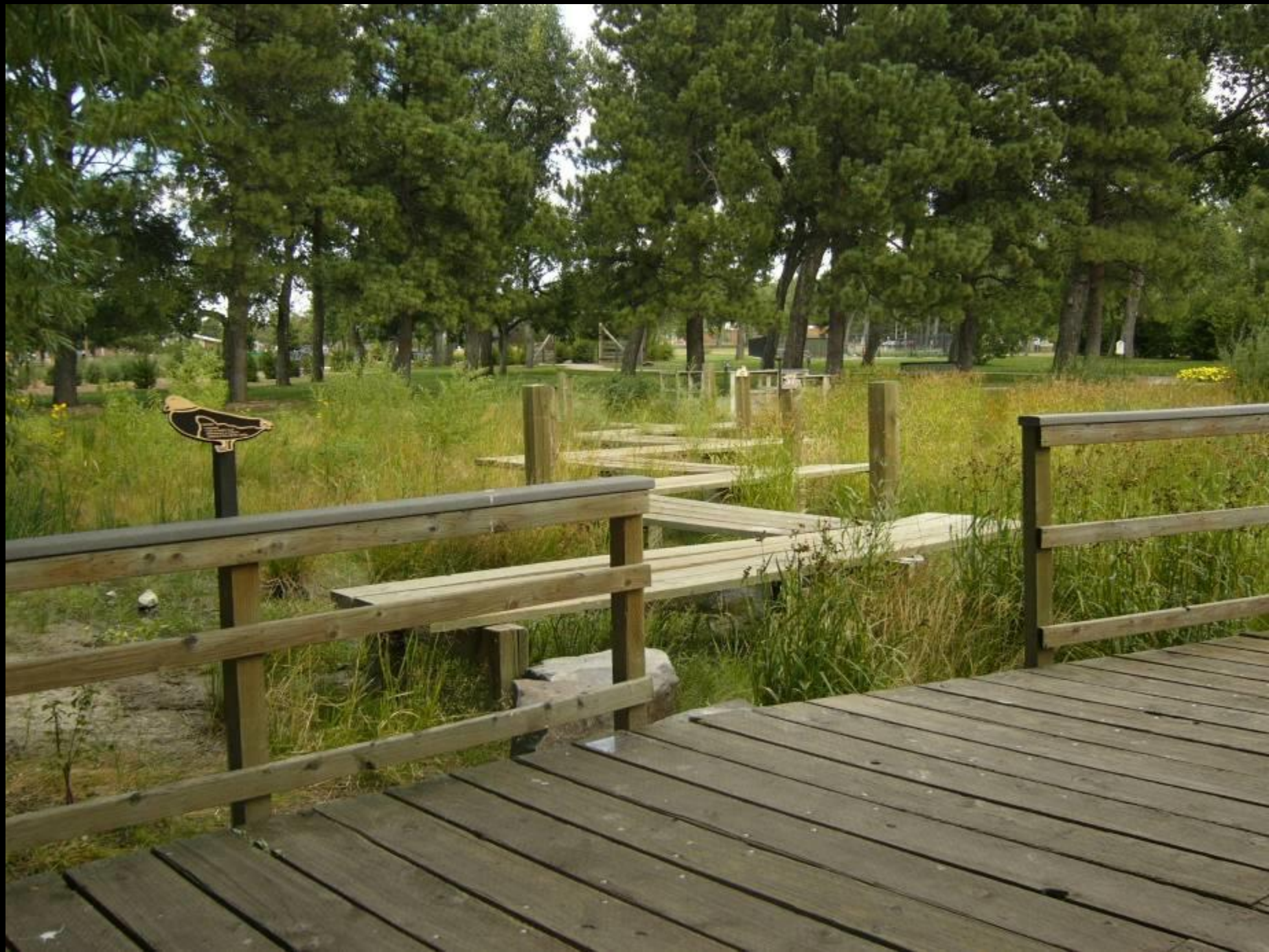




## **Filtering Contaminants**

**I dreamed I was a raindrop  
falling from the sky,  
gathering up pollution  
that made me want to cry.  
I fell into a wetland,  
what a beautiful scene.  
Once I was dirty and now I am clean!**



















## Community Collaborations: on Discovery Pond

- Anonymous donor
- Cheyenne Parks and Recreation Department,
- Wyoming Game and Fish
- U.S. Fish and Wildlife Service
- Audubon Society
- Natural Resource and Conservation District
- Area students, schools and teachers
- Boy Scout Troop 116
- University of Wyoming
- Local Lumber yards
- Volunteers
- Private donors
- Contractor donor





**Encourage ownership  
whenever possible**







Horticultural Therapy  
is an every day activity







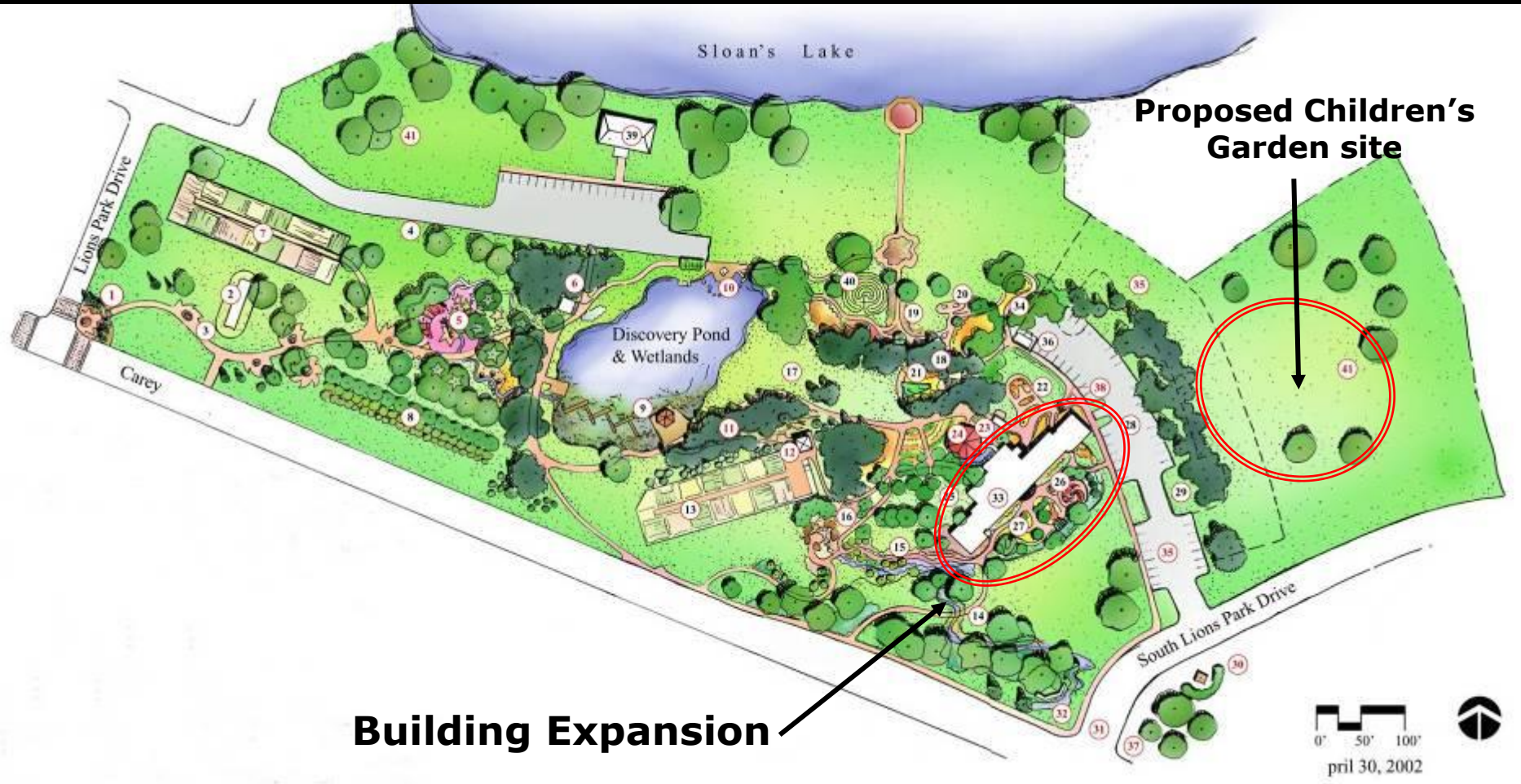








# Finishing our master plan



**Building Expansion**

**Proposed Children's Garden site**

0' 50' 100'

April 30, 2002

# Let's build a Children's Garden!

*Inspiration. . . . APGA*



# Design:



## Use Change: From City Parks Shop to Children's Garden

- \* Remove newer metal building
- \* Preserve historic rock wall and building
- \* Relocate the parks shop to a more appropriate location











**Wetlands**

A Gift From

LAURICE & BONNIE BROWN







**Rules**

- Drop
- Back
- Walk
- Play
- Reach
- Look
- Use
- Share
- Wash
- Listen

Informational sign on the doghouse.





# Sara's Place



"Music is the poetry of the air."  
John Philip Kemmer



*Let the music live on in Sara's place*













HEATER  
From  
CULTURAL



"PRETTY WATER"  
FOUNTAIN  
4'00" DIA.  
MAGUI & CAYNE







# The Birthday Butterfly

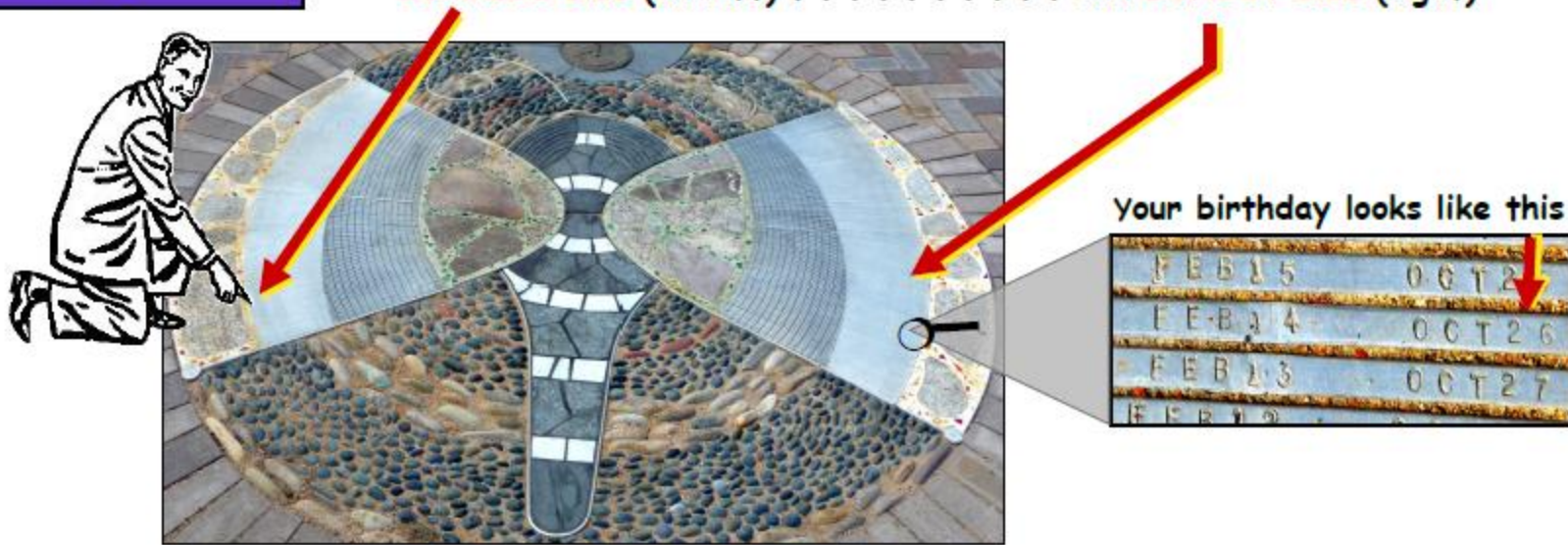
*The sun rises and sets at a different point on the horizon each day*

USE THE BIRTHDAY BUTTERFLY TO DISCOVER

WHERE THE SUN RISES AND SETS ON THE HORIZON ON YOUR BIRTHDAY!

## Step 1:

Look on the ends of the silver rays. Find your birthday on the **SUNRISE** side (on left) . . . . . and **SUNSET** side (right)





# Conservatory Expansion/Renovation



An architectural rendering of a large building complex, likely a school or community center, featuring a prominent central structure with a glass-enclosed roof. The image is annotated with yellow brackets and arrows to highlight specific areas and features. Three labels at the top identify the 'Original Greenhouse' on the left, the 'Expansion' in the center, and the 'Children's Village' on the right. A label at the bottom points to a 'New safer intersection at Carey, parking and pedestrian paths' in the foreground.

Original Greenhouse

Expansion

Children's Village

New safer intersection at Carey, parking and pedestrian paths

# SCIENCE CENTER

Our Mission is changing.



# SCIENCE CENTER The Kiwanis Periscope—



## SCIENCE CENTER

Specialized Classroom microscope  
projection—



# Science Center – Telescope viewing area on rooftop garden



# Science Center – Telescope viewing area on rooftop garden



# ADA compliance: better handicapped access





# The Cheyenne Botanic Gardens



## Growing our Gardens

Where everybody goes and everybody grows

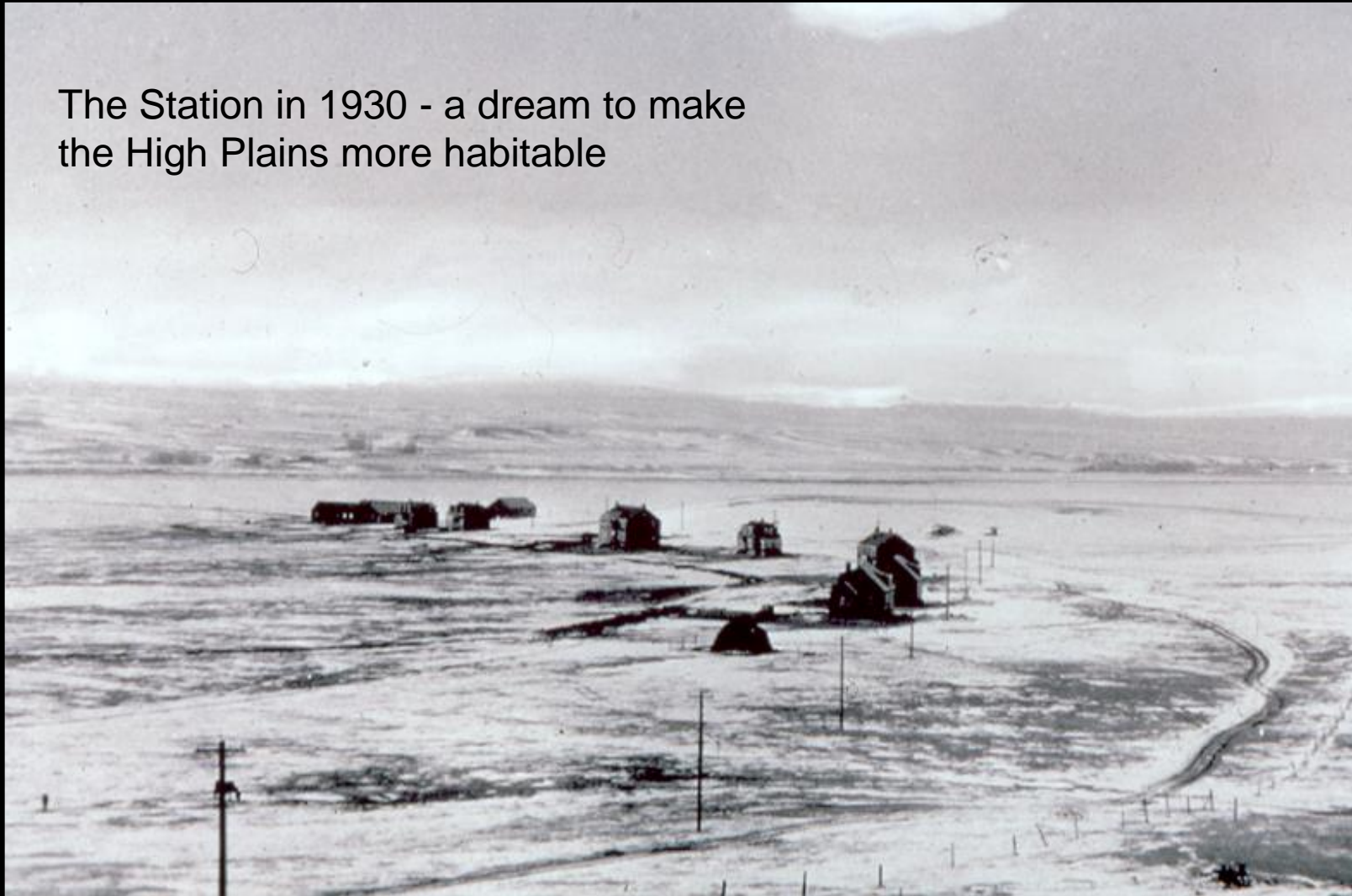
since 1977





# The Cheyenne High Plains Horticulture Field Station was . . .

The Station in 1930 - a dream to make  
the High Plains more habitable



# The Cheyenne Horticulture Field Station

At its peak, the High Plains Horticulture Field Station consisted of thousands of varieties of trees and shrubs, collected from all over the world.













# High Plains Arboretum Master Plan

This plan had input from the Friends of the High Plains Arboretum as well as USDA Staff.

## High Plains Arboretum



Master Plan Report  
March 2003

**EDAW**

All management is  
change management.

**Albert Einstein quote:**  
**"Imagination is more**  
**important than knowledge.**

Nothing great in the  
world has ever been accomplished  
without passion."

- Georg Wilhelm Friedrich

“You must be the person you have never had the courage to be. Gradually, you will discover that you are that person, but until you can see this clearly, you must pretend and invent.”

—Paulo Coelho

Fake it until you make it.

Communicate up and down

Mainly use your voice.

Not your fingers.



"Once you make a decision, the universe conspires to make it happen."

- Ralph Waldo Emerson



# Gardening is not just the cultivation of plants, it is the cultivation of people

