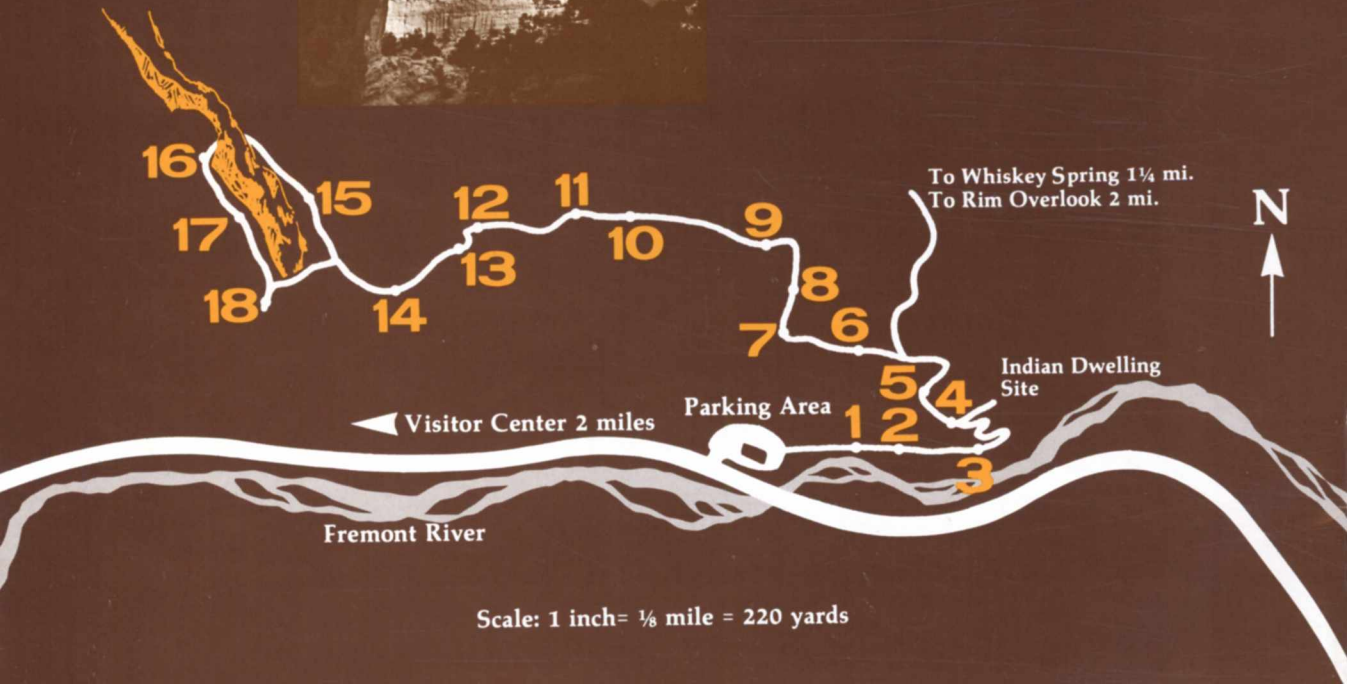
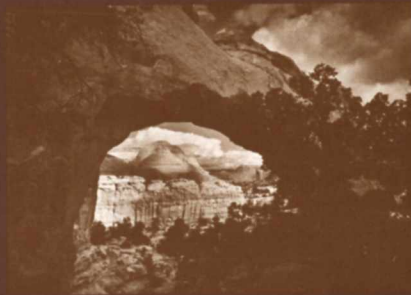




the Hickman Natural Bridge trail

Capitol Reef National Park, Utah

25¢



Scale: 1 inch = 1/8 mile = 220 yards

Welcome to Capitol Reef National Park.

You are about to set out on an adventure—
a two-mile round-trip walk to Hickman Natural Bridge,
a great free-standing curve of rock
hidden in a maze of canyons above the Fremont River.

This walk is for seeing and listening, exploring with your senses,
discovering a few of the secrets of the canyon country wilderness.

You'll climb about 400 feet in fairly gentle grades,
from an elevation here of about 5,320 feet above sea level.
Make hot summer days as easy on yourself as possible—
carry water and take your time; wear a hat if you have one;
make use of benches you'll find in shady spots along the way.

The comments in this guide, keyed to numbered posts on the trail,
will give you answers to some of your questions.
Stop at the Visitor Center, two miles west on the highway,
to learn more of Capitol Reef's secrets.

1

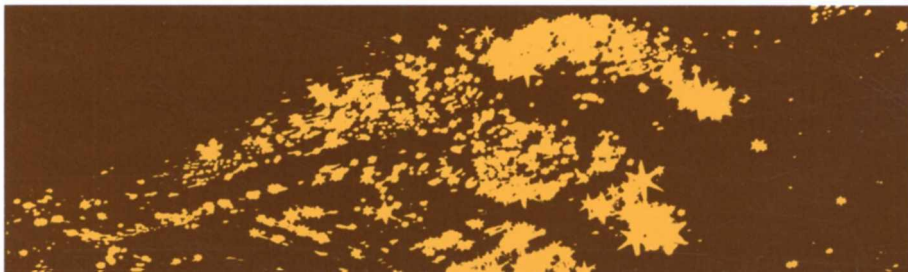
Water.

Its life-giving power, almost magical, brings beaver and heron,
toad and kingfisher, to this narrow ribbon of lush greenery
threading the bone-dry desert.

Plants thrive here that cannot grow elsewhere at Capitol Reef—
cottonwood, willow, tamarisk —
plants whose extravagant use of water
would spell death away from the river.

Stand and listen to the roar of the Fremont River,
watch the sun glint on its surface,
and think about all this stream has done here.
Without it, you would have no cottonwood trees to shade you,
no warblers to serenade you from willow shrubs,

no great canyon carved from rock.





2



As you move away from the river,
instantly you find yourself in a desert.

Less than seven inches of moisture each
year makes this land a tough challenge
for living things.

Many plants and animals cannot live here at all,
unable to cope with the lack of water.

Others survive most easily in this dry place,
so finely tuned to this arid land that
wetter places seem as foreign to them as
does the desert to many of us.

Even their names sound arid—
saltbush, skunkbush, sagebrush lizard,
canyon wren, rock squirrel.

3

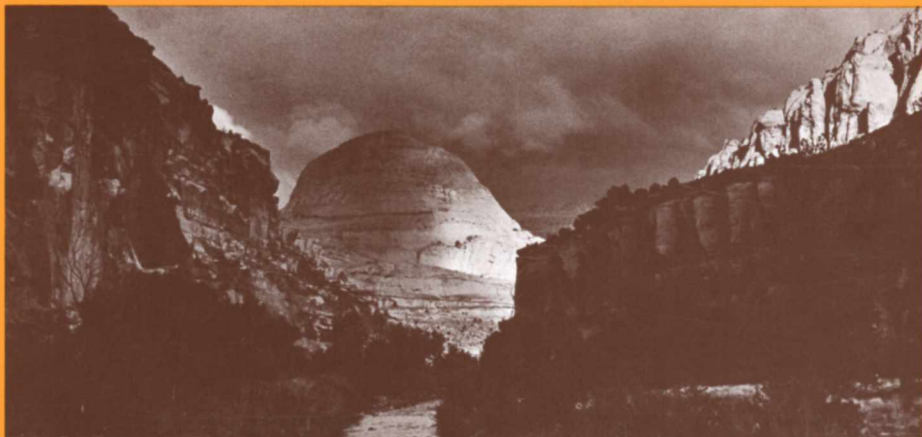
Rock, sky, and river.
And ever-changing light—breathing color and form into stone.

High cliffs,
A jagged backbone nearly one hundred miles long,
an abrupt barrier to travel—akin to an ocean reef.

And the domes, like Capitol Dome just ahead, whose arching contours
trace a pattern in slickrock for the model capitol building.

Domes, cliffs, canyons, mesas . . .

Capitol Reef.





4

Walk to your right about thirty paces.

Water brought *people* to the Fremont canyon, as well.

This ring of black boulders formed the foundation for a pithouse
of adobe, stone, and wood—a home abandoned 800 years ago.

Here, a family of Fremont Indians looked down-canyon past their
small farm plots to the high cliffs
where they stalked desert bighorn.

They lived here only part of the year, requiring minimum shelter
in contrast to the great stone dwellings built by their cousins,
the cliff-dwellers of the Mesa Verde area.

Little remains today of their 250-year stay—
a few remnants of their homes,
fading petroglyphs,
here and there a basket or pot unearthed by the desert wind—
few clues to use in solving the riddle of their disappearance.

Why did they leave?
Where did they go?

5

Lava boulders on sandstone slickrock?
Somehow, they seem misplaced.
And in one way, they *are* misplaced.

At the end of the Ice Age, glaciers covering the high, lava-capped plateaus to the west of Capitol Reef melted.

Great floods of meltwater came thundering down
the Fremont River and its tributaries.

Black lava boulders we see here today arrived at that time,
torn by glaciers from the plateaus,
and rounded by some twenty miles of tumbling downstream.

Each year,
the Fremont slices ever deeper into the earth.

The boulders remain on their ancient floodplain,
now stranded high above the river.
Some glint with the black shine of desert varnish.
Others,
nestled in desert soil for 25,000 years,
glare dull white with alkali.



6

The desert—

A harsh environment that seems beyond the reach of man,
too barren to hurt.

Yet this land that seems so rugged is remarkably fragile.

That dark crust on the soil just past the marker
is a living community of tiny lichens that
protect the land from the forces of erosion.

A careless footstep destroys a century's growth.

Notice the trail ahead. The passing of thousands of people
has worn a groove almost a foot deep through this grassy meadow.

How much stress can this desert land take?

How many visitors can Capitol Reef National Park handle
without harming the landscape forever?

Indian ricegrass



Two kinds of trees,
dwarfed, shrunk, and twisted by their struggle
with sun, dryness, and rock,
dot the arid Southwest with green.

These trees rule their forest,
yet neither tower over the landscape,
produce great volumes of timber,
nor shade a moist forest floor.

They keep their distance from one another, to share meager water.
They stand apart, each struggling with its environment singly.
Several centuries may bring them five feet of upward growth.

Piñon pine—familiar cones and straight pine needles, tasty nuts.
Utah juniper—scaly twig-like leaves, blue-gray berries, cedar-like fragrance.



piñon pine

Utah juniper



8

Not only piñon and juniper struggle for life in this dry land.

All plants living here must adapt—
to slim rainfall and drying winds,
to thin soil,
to heat-shimmered summers and frozen winters.

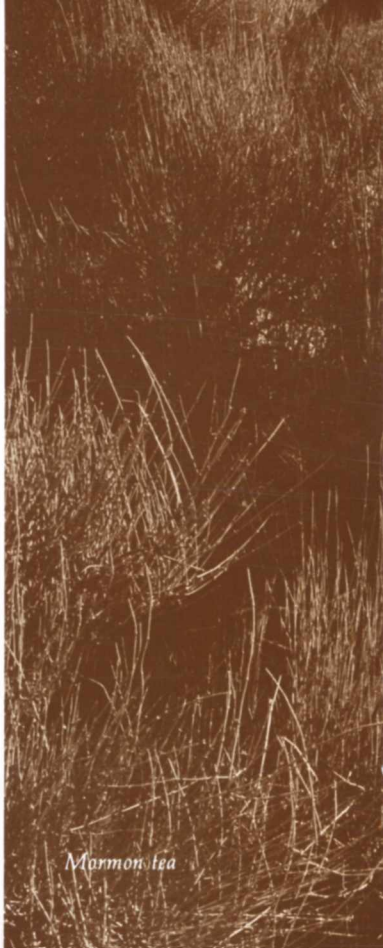
To conserve precious water,
plants have scourged themselves of lush
water-wasting greenery.

Look around you.

Mormon tea—leaves nearly gone, all food-producing chlorophyll concentrated in drought-resistant stems great for tea-brewing.

Roundleaf buffaloberry—reflectant silver leaves leathery on top to foil evaporation, but hairy underneath to ease rainwater absorption, and succulent to store water between storms.

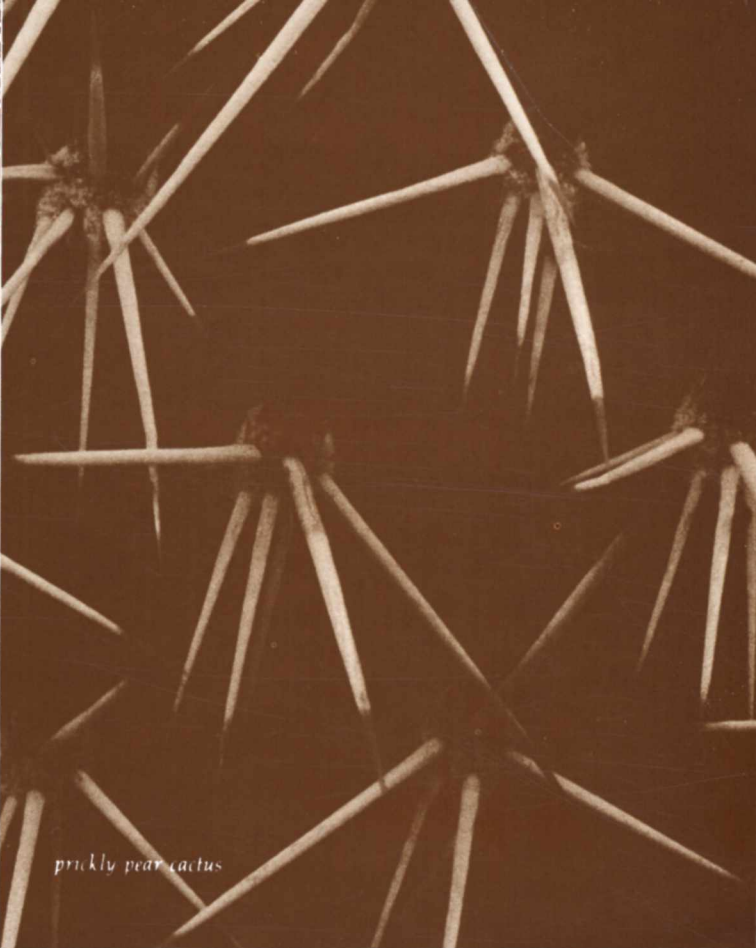
Prickly pear cactus—thick water-storing pads, protected by tough skin and shade-casting thorns.



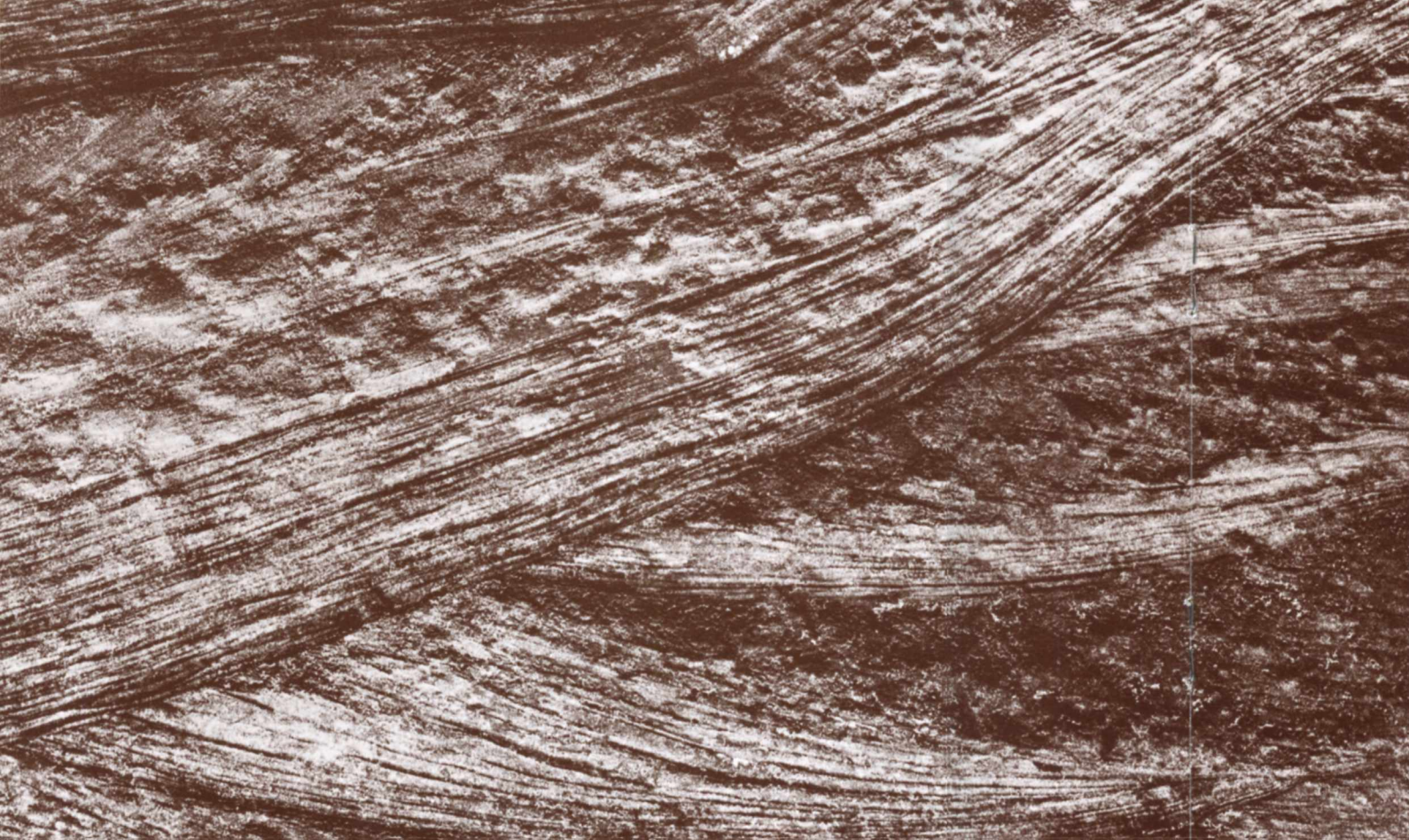
Mormon tea



roundleaf buffaloberry



prickly pear cactus



Try to think like a rock.

Time spans become not years, but millions of years.

To us, these cliffs and domes seem timeless, static.
But they all are constantly changing,
eroding sand grain by sand grain.

Today's erosion continues a long, long cycle—
from dune to rock to dune again.

For the great white domes of Navajo sandstone surrounding you
on the horizon formed from ancient piles of sand grains,
dunes slowly cemented into rock.

Today that rock reveals layers of sand grains blown by winds
of millions of years ago,
each set of layers at angles to the next.

A change in direction of layers mirrors a change in direction
of those ancient winds—
day to day changes from the past
perfectly preserved in rock.

9



10

You are walking through a living, self-renewing
storehouse of household goods.

The Fremont Indians, and, later,
the Paiute Indians and white pioneers,
used the plants surrounding you for food,
shelter, clothing, tools.

Even in this desert, useful plants abound.

Let us look at just one plant—the yucca at your feet.

Leaves provide fibers for weaving—
sandals, mats, baskets, rope, and nets,
as well as sharp tips for needles.

Both pod and flower are edible.

And the root yields soapy lather when
swished in water, a fine shampoo.

Survival required knowledge—of where plants grew,
why they grew there,
when they bloomed.

Past peoples may have understood Capitol
Reef's ecology far better than we do,
now that we no longer depend so closely on
its resources.

This wash holds just enough water in its sand from after-storm flash floods to enable piñon and juniper to grow to shade tree size—certainly welcome on a hot summer day.

Even a few cottonwood trees survive here.

The extra margin of moisture gives life in this small canyon an edge on survival second only to permanent streamcourses.

Even so, the heat of the desert summer forces most animals to remain in cool burrows and dens by day, coming out only at night to forage and hunt.

In daytime you'll likely see only lizards or ground squirrels.

Tracks tell the story of life in this dry wash. How many different tracks can you find here?



chipmunk



ringtail



lizard

chukar



12

Beans, corn, and squash.

These crops, stored in huts like the one on this cliff, formed the mainstays of the diet of the Fremont Indians.

Their homes have disappeared, but their storage huts have withstood more than 800 winters, and countless assaults by pack rats and ringtail “cats.”

The Fremonts also hunted, but if the hunters failed, a safely-stored harvest would feed a family through the winter.

Pioneers thought these huts to be dwellings of very small people, and called them “Moqui” huts after an early name for the Hopi Indians—who are generally small people who build stone and adobe homes.

Climb up and take a closer look.

“Moquis” must have been very small indeed!





Can you find, within a few feet,
a shaded alcove where soft, green ferns and mosses grow?

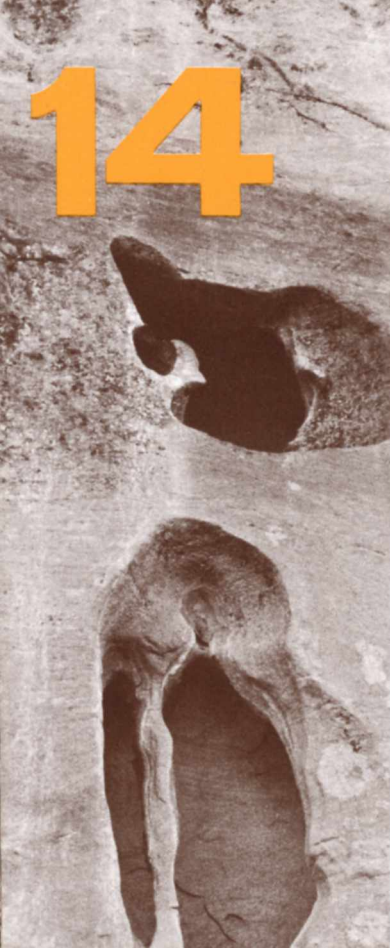
Explore a bit up the wash to your right,
then return to this trail.

Water, when it comes to this land, comes suddenly, with great power.
Potholes etch their curves into bedrock
as floods grind away at the sandstone, whirling water and rock
through the pothole and down the canyon to the Fremont River.

In places,
with time,
water and rock combine
to drill right through, forming
a natural bridge.

These small natural bridges cast permanent shade.
Place your hand on a shaded rock and then, a sunny rock.
How might animals and plants living here make use of that difference?

14



Can you spot Hickman Bridge in that jumble of cliffs?
... an arch of rock in a slickrock wilderness.

Rock.

It dominates your view of Capitol Reef.
Naked, ungiving, overwhelming rock.

Perhaps the feelings that this place arouses depend on that—
the scarcity of life, the immensity of bare and broken rock.
Each touch of green, each bold dash of a lizard means much more here.

Yet the rock itself has great variety—almost personality.
Diversity in color and form.
Hard rock, soft rock, smooth rock and rough.

Holes honeycombing many cliffs owe their existence to water—
the great erosional force at Capitol Reef.
Sandstone amounts to nothing more than a mass of sand grains
cemented by minerals.
Where cement is weak,
water and weather can dissolve it easily,
forming the holes and pockets that pattern cliffs along the Reef.

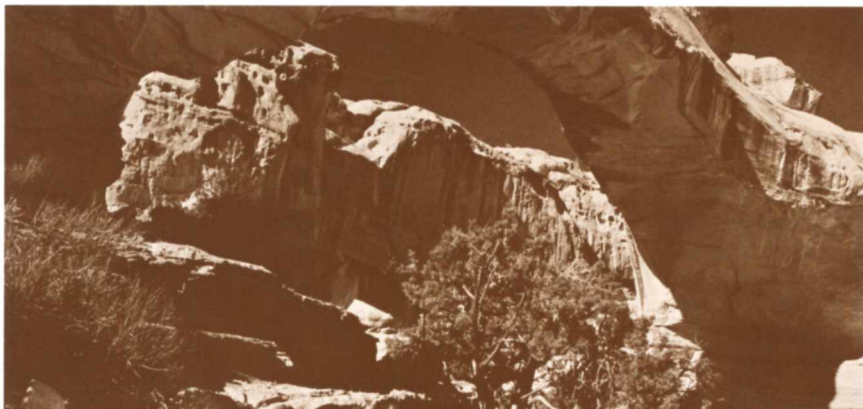


15

A graceful stone semicircle,
one hundred and thirty-three feet across,
a natural bridge
named for a man of vision . . . Joseph Hickman.

Joseph Hickman, who,
with Ephraim Pectol, another local man,
worked for years to preserve this land.

Their efforts succeeded.
Today Capitol Reef National Park serves
as retreat and preserve,
playground and school,
to all who come here.



Picture this place before the bridge formed,
a narrow rib of sandstone, a "fin,"
a canyon running behind it, at times,
roaring with great tumbles of water and rock in flood.

Somewhere in the far past—slowly, ever so slowly—
a shallow alcove along that canyon wall begins to enlarge.

Perhaps twice a century, a great block of stone falls—
pried loose by release of stress long trapped in the rock,
or by freezing.

Water dissolves cement, carrying away the cliff grain by grain.
Wind batters the fin year after year.

Then, one day,
a crucial line of weakness gives way, rock topples from the cliff,
and blue sky gleams through an opening in the fin.

Suddenly finding an easier way down,
flood after flood scour through the freshly-cut opening, and
a new canyon forms.

Left stranded one hundred and twenty-five feet above today's floodwaters,
a gentle curve of stone remains . . .

Hickman Natural Bridge.

17

Patterns.
Textures.
Color and form, feel and smell.
Sounds.

Silence.

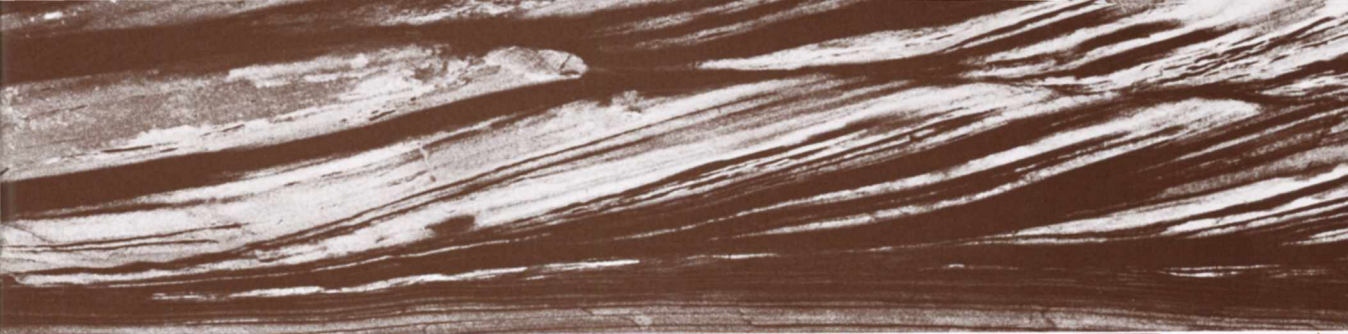
Golden sun-tones and cedar-smell of old juniper gnarls.
The whoosh of a violet-green swallow sailing past,
close after insects.
A raven's croak, a chukar's cackle, a dove's whooo.
Rock tapestries, hanging in stillness and simplicity.

The wind
ruffling juniper or cottonwood,
whistling through the cliffs.
The amazing diversity of a single canyon.

If we only look,
we may see.



mourning dove



18

Walk a few steps out to the rim.

Upstream lie the pioneer orchards of Fruita—
nourished by the waters of the Fremont,
the river traceable downstream by canyon and cottonwood.
In the far western distance, the high plateaus loom,
blue and hazy—
source of the Fremont, birthplace of these lava boulders.

To the east, the river flows on through time, through the desert,
carving a few inches deeper into rock each century,
swirling the sands of Capitol Reef to the Colorado River,
and, finally, to the sea.

Capitol Reef National Park.

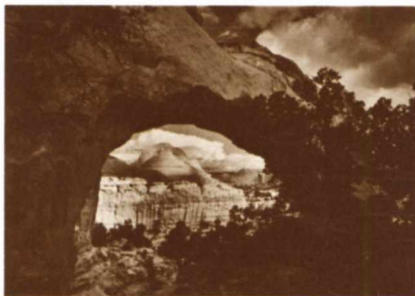
A place of wild beauty, a place preserved.
But inseparably linked to the surrounding world.



As you walk back along the trail,
remember that Hickman Bridge is not so very far from your home,
that you, too, are now linked to the bridge and its canyon world
by bonds formed on this trail—
bonds of knowledge.

You have invested precious time and energy in seeing this land,
and, in turn,
the desert has shared a few of its secrets with you.

Those secrets are seeds of wisdom.
Care for them, and they will grow.



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