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EVERGREEN

Bob Zybach Voices in the Forest

We Climbed The

HIGHEST MOUNTAINS

It was called the "photo-recording transit, and it took what were called "oriented panoramic photographs."

Part camera and part surveyor's transit, the device was designed by the late W.B. Osborne, inventor of the widely used Osborne fire-finder, and senior regional forest inspector with the U.S. Forest Service in the 1930's.

In their day, "oriented panogramic photographs" were more simply known as "Osbornes," and the "photo recording transit" was called "an Osborne." or an "Osborne camera."

Osborne cameras took 360-degree photographs, complete with ruler-like markings that called out each of the 360 degree points on a compass. "O" and 360 degrees are the same point, and the point is magnetic North. East is 90 degrees, South is 180 degrees and West is 270 degrees.

Each 360-degree Osborne photograph consisted of three, 120-degree photographs, taken clockwise with "O" in the center of the middle photograph. Each of these 120-degree views was 13 inches wide and five inches deep. Butted end-to-end, the three pictures become one 39-inch-long picture. It is a perfect circle laid flat, with you in the middle. You can see what is out straight ahead, what is straight behind you, and what is on your left and right.

The Osborne weighed 75 pounds, and consisted of four parts: a camera housing and body, complete with magnetic compass and key-wound clock motor that powered the camera on its 360-degree journey; a tripod head with leveling screws and a 0-360-degree azimuth ring, like what is found on surveyor's transits; telescoping legs that were bolted to the tripod head; and a 5.9-inch shutterless Bausch and Lomb lens.

Only six Osbornes were ever made, each to the inventor's exacting specification by Leupold-Volpel & Company, Portland, now called Leupold & Stevens, and best known for its binoculars and rifle scopes.

Between June, 1933 and October, 1935, the U.S. Forest Service took 813 Osborne photographs, each from fire lookouts that topped the highest accessible vantage points in Oregon and Washington. Each of these old photographs bears the name of the lookout, the national forest, the photographer, the date the photograph was taken and a numbered azimuth scale and level line.

Osbornes had only one purpose: to help forest fire fighters get to the scene quicker. There were no Borate bombers back then, and it would be a few more years before the first smokejumpers would step into the sky over Big Sky Country, also called Montana.

Once mounted in rugged, three-fold cardboard albums, a set of Osbornes took most of the guess-work out of the business of pinpointing the locations of forest fires. When vellum overlays showing the locations of roads and trails were added, first-attack strike teams could determine how long it would take to reach the fire and what equipment would be needed.

No one knows how many of these old Osbornes survive, but for the last six months, The Evergreen Foundation has been engaged in a wide-ranging search for their whereabouts.

In this center-fold-out, we present the first two Osbornes we found:

• A splendid view of the aftermath of the 1907 Soleduck fire, taken from Kloshe Nanitch Lookout, August 24, 1935. In three hours, the 1907 fire raged across 10,000 acres near Lake Crescent in the Olympic National Forest.

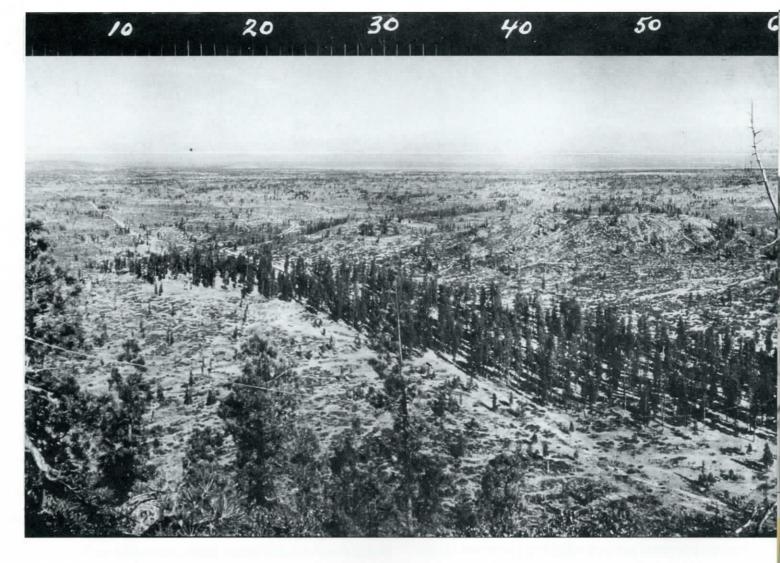
A bird's eye view from atop Lava Butte, one of the best known and most popular vista points in Central Oregon. This is one of the earliest known Osbornes, taken October 30, 1929, when the camera and its transit were still in the developmental stage.

Our Soleduck and Lava Butte Osbornes are each accompanied by new photographs, taken from the same vantage point as the originals. These new photographs were taken by Mike McMurray, who is perhaps the finest forest photographer working today. He re-photographed Soleduck last December 22, and Lava Butte January 14.

We present these contrasting photographs - the old and the new - because they show how resilient forests are, and how quickly change comes to forests that seem to most people to be frozen in time.

When we first saw the Osbornes now in our collection, it occurred to us that these were more than photographs. They are voices, and unlike many of the other earlier voices whose sounds are now so distant they are hard to hear and understand, these Osborne voices speak with remarkable clarity and conciseness. Not much is left to the imagination, and there is no longer a need to romance about what might have been in pre-settlement forests.

You can look at the Osborne taken from Kloshe Nanitch Lookout, and the voice says, "If you had been standing on top of Kloshe Nanitch Lookout on August 24, 1935, this is what you would have seen in the Soleduck Valley."



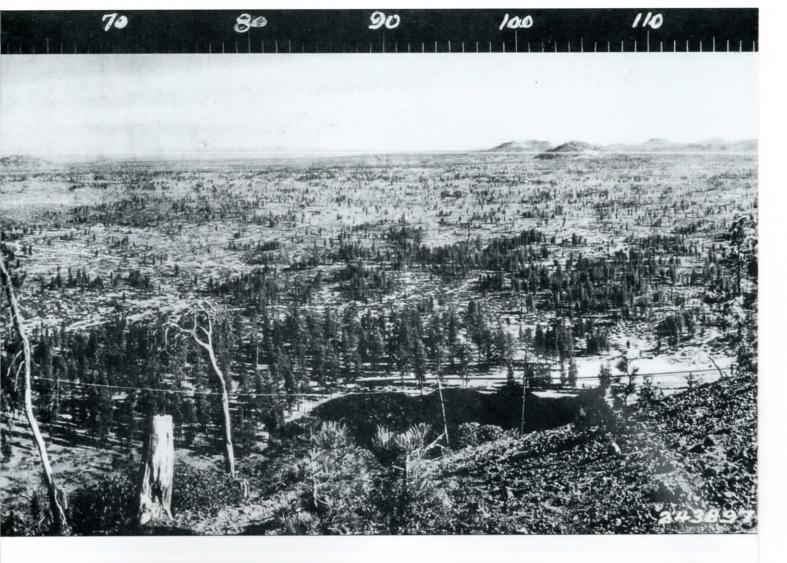
TWO VIEWS FROM LAVA BUTTE - Above, perhaps the first Osborne photograph ever taken, October 30, 1929. Below, December 8, 1993. Both photographs cover the same view - from "zero" degrees, which is north, rotating right to 120 degrees, which is southeast.

Lava Butte is one of central Oregon's most popular tourist

viewpoints, though most who go there probably do not know the area is much more heavily timbered now than it was when the first Osborne photographs were taken.

Last December, we sent Bend, Oregon photographer, Mike McMurray, to the top of Lava Butte to re-photograph what was photographed in October, 1929. His four photographs, covering





the same 0-120-degree view, appear below. Fire suppression is a big reason for the forest's encroachment on what was a prairie.

Redmond and Bend, Oregon are at about the 18 and 21-degree points, Bessie Butte about 60 degrees, Pine Mountain about 90 degrees and Newberry Crater is at about 120 degrees. Highway 97 is plainly visible in Mr. McMurray's photographs and

can be seen in the lower left corner of the Osborne.

The 1929 Osborne, and Mr. McMurray's 1993 photographs, both cover a 360-degree view, but there is not enough space on these facing pages to show the other 240 degrees in any appreciable size. To see what a 360-degree Osborne looked like, open the gatefold.



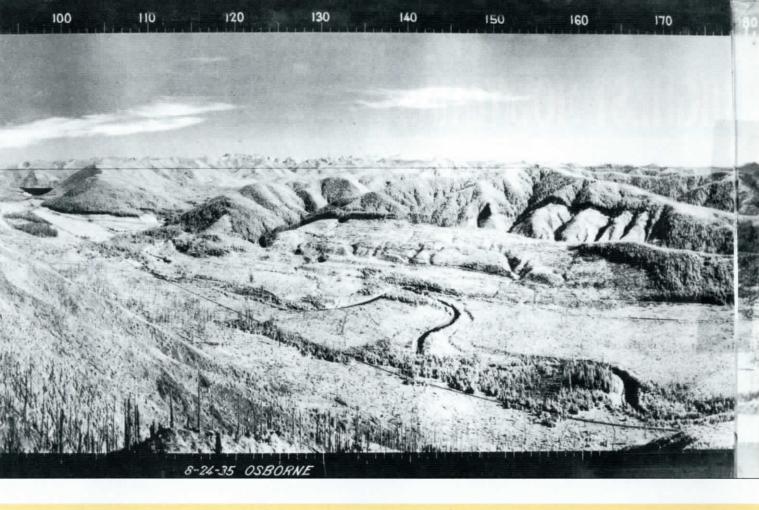


TWO VIEWS FROM KLOSHE NANITCH LOOKOUT - A 360-degree view of the Soleduck Ranger District on the Olympic National Forest, on the Olympic Peninsula, in the far northwest corner of Washington state, August 24, 1935.

This black and white photograph shows what a real Osborne looked like. If you fought fire for the United

States Forest Service in the 1930's, you might well have carried these in your pack. They would have been mounted end-to-end on fold-up hardboard panels, and using the imprinted degree-scale, and plastic overlays showing the locations of roads and trails, you could have found your way to a fire.





Forest Service records list 295 fires on the Soleduck between 1907 and 1983. The largest was the 1907 fire, shown in this Osborne. It burned 12,800 acres. Notations from a 1915 Forest Service report indicate most areas burned or re-burned grew back quickly. Referring to one 648-acre burn, the report's author wrote, "The burned

areas have reproduced to good stands of Douglas-fir, hemlock and cedar of impenetrable density."

Below, a series of Mike McMurray photographs showing the same 360-degree view on December 22, 1993. Find Mr. McMurray's pickup, then find the horses in the old Osborne. Horses and pickup are at the same location.





in a state of suspended animation.

Change in nature is frequent and sometimes violent.

Given the Soleduck's fire history, it is unlikely the forest Mr. McMurray photographed would be with us today were it not for Congress' 1910 decision to fight forest fires. Because of this "fire suppression policy," forests throughout the Pacific

Northwest are more dense than were the forests seen by the region's first white settlers. Where stands have grown too dense, "forest health" problems have developed, prompting debate between those who favor salvaging dead timber and those who favor allowing wildfires to "restore" these forests to "pre-settlement conditions."





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The voice also says, "To see the future, see the past."

We have yet to find a sea of old growth in the Osbornes we've examined. To be sure, some of these panoramas are of big valleys filled with big trees. But as is often the case, the panorama next door is of big valleys after big fires, like Soleduck.

To the trained eye, these old Osbornes reveal much about how this region's forests are born, live and die. You can see, first hand, what Dr. Chad Oliver meant when he talked with us last fall about turmoil being the only real constant in nature; and when you add in Mike McMurray's new photographs, you can see how change follows turmoil, and how forests re-invent themselves in the aftermath of human or natural disturbance.

Pieced together, all 813 Osbornes would present the most concise picture ever taken of this region's forests. Unfortunately, the President scientist's make no mention of these photographs, and we assume they do not know of their existence.

The Osbornes are not the only photographs that show what this region's forests have looked like through time. There are many fine history books containing old photographs of old forests. Several of the region's earliest tree farmers also have excellent private collections. The same is true of local and state historical societies. There is also the Forest History Society's recently published booklet titled, *American Forests: A History of Resiliency and Recovery*, and a very informative video by the same name, produced by the U.S. Forest Service.

The Forest Service has also published two remarkable "before and after" picture books we recommend highly.

Fire and Vegetative Trends in the Northern Rockies: Interpretations from 1871-1982 Photographs features the work of George Gruell, a retired Forest Service wildlife biologist and fire ecologist. His photographs are of forests in Idaho and Montana.

Snapshot In Time: Repeat Photography on the Boise National Forest 1870-1992 is what it says it is. What may be most interesting about this book is the reaction it prompted from one Forest Service employee writing in the November 4, 1993 edition of Forest Management News, one of the agency's many in-house electronic newsletters.

"The photos graphically demonstrate how a century of reduced fire frequency has profoundly altered the forest land-scape and its ecological functioning," she wrote. "It also suggests how different the public's perception of the 'pristine' presettlement forest is from the reality shown by 19th century photos. The pre-settlement forest on the Boise was not a closed 'climax' old growth forest in steady-state equilibrium balance with the environment, as is often perceived."

And later in the same musing, "As the Forest Service moves to ecosystem management, dealing with the myths and realities of pre-settlement landscapes versus today's landscapes will be a huge challenge for the Agency, both internally and externally. Use of repeat photography is a powerful tool that can help us come to grips with that challenge."

We could not agree more, which is why we are now following in Albert Arnst's footsteps to the tops of some of the highest mountains, where we are re-photographing voices last photographed in the 1930's. In future issues of *Evergreen*, you will see what we heard.



An Osborne in use. Photo from "We Climbed The Highest Mountains" by Albert Arnst

Editor's Note: "We Climbed The Highest Mountains" takes its name from a booklet by the same name, written in 1985 by Albert Arnst, who was an Osborne photographer during the years the cameras were in use.

Mr. Arnst worked with Mr. Osborne and had the distinction of taking what may have been the first "official" Osborne, in early 1933, from Lava Butte, just south of Bend, Oregon. The three photographs he took are still on display at the Lava Butte visitor center.

Mr. Arnst went on to become an assistant district ranger on the Rogue River National Forest, a district ranger on the Fremont National Forest, and years later, an information officer in the Forest Service's Washington, D.C. office.

In the years between his first and second careers with the Forest Service, he was a public information officer with the Weyerhaeuser Company for several years, editor of *The Lumberman* and *The Timberman*, which were later merged to form *Forest Industries* magazine, now called *Wood Technology* magazine.

He retired from the Forest Service for the last time in 1975, only to become editor of yet another publication, the Western Conservation Journal.

Mr. Arnst's We Climbed The Highest Mountains is a fascinating booklet and even includes a table summarizing the entire cost of the Osborne project for the years 1933-1935:

1,923 man-days in the field

813 stations photographs

2.37 days per station

103,700 miles traveled, including 3,000 miles on horseback and 700 miles on foot.

Total cost: \$20,837.44

Average cost per Osborne: \$25.63 My oh my, how times have changed!