

IMAGE

SOUND

SCARS ON THE SURFACE

JAMAICA MINING
MONTAGE

NARRATOR:

This is Jamaican earth the tourist rarely sees.
Pound for pound more valuable than the white
sand of her North Coast. The red clay is bauxite,
the ore from which aluminum is made.

The price Jamaica pays for her development is the
loss of her land .. and as she grows richer, she
grows smaller.

SUPER
MAN BUILDS
MAN DESTROYS

A series of programmes about this planet and
what man is doing to it.

APPLE

The earth's surface is like the skin of an apple.
To disturb it is to destroy it. We've been
strip mining less than forty years but we've
left a signature on the land that centuries
won't erase -- today, strip mining is a growing
national problem.

AERIAL OF
SCARRED LAND
IN OHIO

Some efforts have been made to restore the land
to its former beauty and best natural purpose...
but you can't put it back. The scars cut into the
earth today won't disappear tomorrow. A strip
mine is forever.

SUPER
SCARS ON
THE SURFACE

NARRATOR:

HIGHWAY

Motorists traveling an interstate highway in

STRIP MINE SHOVEL

the wonderful world of Ohio are often startled to see what appears to be a gigantic pre-historic monster inching towards the roadway. On closer

AERIAL GEM
OF EGYPT

examination one finds it to be another 20th

Century marvel -- a twenty story strip mine

shovel capable of tearing up earth at a rate of

200 tons per bite. And as it feed its appetite

it looks to greener pastures.

BARNESVILLE
SEQUENCE

PROFESSOR
CLAUDE COLDIN

COLDIN: VO

Well, as you know, they intend to bring this monstrous shovel -- called the giant earth mover -- across an interstate highway, I 70, and once it crosses that highway it will move into the area of Barnesville. It's sort of a Centerville, U.S.A. if you will, typical of so many towns in this area and to the west of us. It's a growing town, it's a friendly town, it's a town that's populated, by the way, by a great many Quakers friends, and they are asking the coal companies, right now, if -- they could be allowed -- in the midst of all this mining -- to have just a protective belt of five miles -- around the town -- that would allow it -- to take care of hopeful expansion.

MAIN STREET

PEDESTRIANS
SCHOOL BOYS

AERIAL OF
BARNESVILLE

ROADSIDE
TRAVELING SHOT

Mind you, this shows you some of the spirit of the people here. They are hopeful of expansion. But, of course, if the stripping continues, they'll be like the top of an apple core -- with no place to expand. And so they're hopeful that if their town grows, and certainly it will, old as it

may be, they are still hopeful people -- they want that area -- that five mile green belt, as they call it, will allow them to expand and have some hope for the future.

COLDIN
ON CAMERA

Now imagine a request like this, to a land destroying organization. It -- it's a very soulful plea. But a very important one to illustrate the widespread quality or quantity of stripping -- that's going on by the strip mining industry.

NARRATOR:

ANIMATION
GLOBE TURNING

Rare indeed is a corner of the globe that has not yet felt the bite of man's tools. A once fertile land -- plundered -- for minerals to bring us wealth and power.

MACHINE MONTAGE

MINERS

Coal mining was a primitive industry whose methods had changed little in the hundred years prior to 1945. Largely a pick and shovel operation carried on underground with little visible effect on the land. The advent of the bulldozer and the dragline changed all that.

FREEZE FRAME

DRAGLINE SHOVEL

Surface or strip mining then began in earnest. Now the minerals could be mined from above. Peel back the soil and expose the seams of coal. Take the riches and leave the wastes. As the demands for coal grew -- this cheaper and safer method of extraction became part of the American landscape.

APPALACHIAN
MOUNTAINS
DISSOLVE TO
SCENIC SHOT

CAUDILL: VO

When I fly over these hills in East Kentucky, I look down on one of the oldest mountain ranges in the world, some 250 million years old. And I look down on the remnants of the oldest forest on earth outside the equatorial bench.

Before it was a forest, it was a swamp, and when it was a swamp, the ferns and the flowers and the great trees fell and rotted and turned into tremendous deposits of coal.

ZOOM OUT FROM
SCARRED HILL

I see this forest, the richest in the globe and then I see the scars that have resulted from the extraction of the coal beneath it.

HARRY CAUDILL
ON CAMERA

Coal is man's constant companion. From the time a man or woman rises in the morning until the end of the day, in one form or another, he is in contact with coal's product all day long -- aspirin, many medicines, dyes, paints, the fabrics and the shirts we wear -- come from coal, and so we reach out our industrial tentacles to wherever the coal lies. And whether it be an Indian tribe or an Appalachian community, it appears that all have to be uprooted and driven out in order to satisfy the society's craving for this mineral.

STRIP MINING
MONTAGE

(MUSIC AND EFFECTS)

EXTREME LS OF
TORN HILLSIDE
ENGINEERS

CAUDILL: VO

From an engineer's point of view, strip mining is the ultimate in mining efficiency, it's the culmination of long work and long development and new earth moving techniques to dig the minerals out of the earth cheaply and quickly. Environmentally, it's an extreme tragedy. It is a total assault on the environment -- the land, the forest, the creatures that inhabit the land -- including man.

BULLDOZER

CAUDILL
ON CAMERA

We ought to stop strip mining forthrightly and forever, in areas like central Appalachia where restoration of the land to its natural utility is impossible.

DON MANNING
COAL OPERATOR
ON CAMERA

MANNING:

It will never exactly look like it did before. We'll put it back where it will actually, it will be a pretty bench -- you'll have vegetation,

grass, trees, but it takes a cycle of from 3 to 5 years to really get it going, but we'll have vegetation on it by the end of this fall --which will be grass and small trees.

NARRATOR:

WASHED OUT
LAND

Rainfall averages 50 inches annually in Eastern Kentucky. The impact of rain on strip mined land is catastrophic. Enormous gullies are cut into the slopes and sheets of soil are washed away. Legislation requires all strip mined land to be reclaimed. Hydroseeding is one means of reducing erosion and replacing the scars with a green cover. Somehow the technology to restore seems inadequate when measured against the ability to destroy.

SOIL RECIAMATION

DAVE MYERS
FORESTRY ENGINEER
ON CAMERA

MYERS:

To me this is one of the biggest challenges of conservation. I believe that this land can be reclaimed, and will fit right in with all the conservation standards.

FRED SCHUMANN
AGRONOMIST
ON CAMERA

SCHUMANN:

Dave and I are believers, we believe that proper things can be done, and it'll allow us to get the coal which is a resource, and it's conserved when we mine out this outcrop coal, it's that they haven't been able to get from deep mines, and I feel we should get this coal and put the land back to at least as good a use as it was before. We think we can change most of the areas into a better use, maybe develop something that will be here for years to come, it'll help succeeding generations getting their livelihood in eastern Kentucky.

MYERS
ON CAMERA

MYERS:
Surface mining right now, reclamation of surface mining right now is an infant industry, I guess you could call it. Nobody really knows how to do it, nobody's been faced with it before. We're more or less the inventors of how to do it. And until somebody learns how to do it quickly and efficiently, there will be criticism.

NARRATOR:

TRAVELING SHOT
LOTT'S CREEK

In Lotts Creek, Kentucky, there is much criticism. The toll in human misery equals that of the land. The young have left -- for future's elsewhere. The old -- most on welfare -- are prisoners to a land made barren for generations to come.

TRAVELING THRU
HOLLOWS OF
LOTT'S CREEK

CAUDILL: VO

The Appalachian mountain area, of course, have been depressed for more than a century. It was depressed in the days of Abraham Lincoln and before, but the coal industry has had complete sway in the mountains for a century now.

WOODROW
BUS DRIVER
ON CAMERA

WOODROW:

There won't be anything on this in a hundred years. There'll be damages from this very thing a hundred years from today -- as time stands. I don't know when, I guess no one else knows that too. But I would say that peoples gonna have to flee here unless something's done.

TRAVELING SHOT

CAUDILL: VO

The poverty that afflicts this region today is industrial poverty. It is a poverty that is mixed very heavily with degradation and apathy, and these grow out of the fact that the region is so completely dominated by the mining interests.

FARMER FELTON
ON CAMERA

FELTON:

I'd say if they could stop it, it ought to be stopped. What's left? I don't know whether they can stop it, whether they can or whether they can't or what -- it's up to our government, I imagine.

TRAVELING SHOT

CAUDILL: VO

People have become in the main superfluous to the principal activities of the region, and most of the people have no role in the region's life.

FARREL BARNETT
ON CAMERA

BARNETT:

You see this water -- the color that it is -- that's coal dust in it. This mining company back here, they are dipping it up where they wash their coal and loading it in trucks and dumping it in this hollow here and all that's coming down in the main stream. And I went back there last Sunday and told them to stop and then this morning, it's running black again. And that's all I want to say.

TRAVELING SHOT

CAUDILL: VO

And being ignored by the industries which provide inadequate funds for schooling and roads and the other facilities and institutions we need.

MARY COMBS
ON CAMERA

COMBS:

They cheated these old people out of it. You all know how they got it. Half of the old people couldn't read and write, and they just marked with an X, and I'll tell you what I've heard my Dad say, that when -- this lawyer typed in what he wanted them to know about selling the minerals -- and he left a space and he got them to sign with an X then, then he tacked in what he wanted in below that to make it like they wanted it. Everything.

TRAVELING SHOT

CAUDILL: VO

The region continues to blunder along in its poverty and backwardness. We present the melancholy spectacle of one of the richest lands on earth having been turned into the homes of some of the poorest people to be found in any industrial western society.

ALICE SLONE
ON CAMERA

SLONE:

I'd like to see it stopped, completely stopped. You cannot disturb this land as this is here, you just can't disturb it. It's got to go down and down and down.

TRAVELING SHOT
THROUGH LOTT'S CREEK

CAUDILL: VO

As a people, we became poor on one of the richest lands in the world.

NARRATOR:

TRAVELING SHOT MOVES
TO SCARRED HILLSIDES
WRECKED HOUSE

Today the Cumberland plateau is a wasteland of sterile hillsides... abandoned company towns, junked and rusting automobiles and refuse clogged streams.

JUNKED CARS

SWOLLEN RIVER

TOWN OF BLACKIE,
KENTUCKY

These Appalachian hills were once rich. Today they are degraded, and the decay goes deep. When you rob and plunder the land, you destroy the spirit of it's people. Clannish and grim still, those who live in the hollows have little voice in their struggle against the machine.

ESTAB. SHOT OF
JOE BEGLEY IN
FRONT OF STORE

Joe Begley is a grocer in Blackie, Kentucky. He also heads a citizens group for the preservation of the surface rights. And he struggles.

CU JOE BEGLEY

BEGLEY: VO

FLOODED RIVER

If we have another flood here and it's like this, our people is worried today, our people below here in Blackie County is literally scared to death. They're watching this river now, and when all of this debris, you actually are visiting here, three to five years before complete destruction comes to many of the people along the river.

BEGLEY
ON CAMERA

BEGLEY:

There's no such thing as reclamation here, it's a damn joke. I've said that many times. What has already been done here, there would have to be a new creation of this earth to put this back like it once was. We got land here, acres and acres, that's laid to rest for ever and eternity by the modern methods of strip mining. There's no hope to put it back. Why should you put it back? Is it worth putting back? They spent more money in Vietnam and going to the moon, wouldn't even faze if all of that money was applied to try to put these mountains back, they would be like a needle in a haystack. There's no hope to put it back. It's gone forever. And it's taken our people.

AERIAL OF
STRIP MINED LAND

NARRATOR:

If the mark left on the face of the earth by 20th Century man is a measure of his greatness then surely his work is genius, and the scars of Kentucky and Ohio are only the beginning of his total onslaught against this planet. We are now aware that we face a future with little virgin land.

TRUCKS
DENUDED HILLS

TREES CLEARING

Yet the current desire to save the environment seems to be in conflict with an increasing appetite for growth.

PAKISTAN

In Pakistan a huge dam will block the Indus River and help remake the economy of a nation.

NEW GUINEA

What until recently was a primitive trail is the beginning of a network of roads to criss cross New Guinea.

BRAZIL

In Brazil a mountain is torn apart to obtain the iron it so jealously guards.

ZAMBIA

You can make electricity from steam water, oil, coal or atomic energy -- but the conductor is always copper. Zambia is richer because of the red metal.

TIMBER

The timber from the jungles of the South Pacific and West Africa fall before the machine -- and that too is progress.

HONG KONG

And in Hong Kong, where living space is precious, shanty towns co-exist with new housing complexes and power plants.

LAND GRADER
AND WOMAN

There are not so many scars on the land of the developing nations; but there soon will be.

CHILDREN

Growth seems to be the answer to poverty, misery and increasing populations. Most are only too

STREE SCENE

eager to join the ranks of the world's polluters.

PHILIPPE DE SYENES
ON CAMERA

DE SEYNES:

I would stress that the main need for the 2/3 of humanity now, is to industrialize, that means to absorb a certain degree of pollution which they didn't suffer or enjoy before --

this is the main need. Even with that imperative, they can take steps by proper planning, by using their brains if you like, and taking advantage of the experience of other countries, they can do a lot to minimize the pollution.

NARRATOR:

AERIAL OF
JAMAICA

Jamaica is one of the developing nations. Her two leading industries are prominently displayed on her coast. One -- the white sand of tourism, the other -- the red clay of bauxite. While Jamaica is the world's number one provider of this ore, she lacks the electric power necessary for the production of aluminum. So daily, tons of Jamaican soil are taken to foreign shores.

SURFACE MINING

FARMER

ENGINEER AND
FARMER

In Dry Harbour Mountain, a farmer's yield from ore laden soil is poor. One of the North American mining companies has offered to buy his land in exchange for a relocation of him and his family on acreage suitable for farming.

RECLAIMED LAND

The objective is to mine bauxite, but the land is not lost forever. The government insists on restoration of the land.

PASTURES

Eventually, the mountain valley will settle back to the gentle rhythm of grazing cattle and growing crops.

HOUSES

This sane land ethic in Jamaica is a far cry from the devastation of Appalachia. The slight

TRUCKS

scars on Jamaica's surface prove that restoration can be done.

ROCKET LAUNCH

(MUSIC AND EFFECTS)

SATELLITE PHOTOS

Industrial man has taken the raw materials of a wilderness environment and converted them to his own use -- within a few hundred years.

SUN THRU TREES

But only a third of mankind seems hypnotized by this technological mentality, seeing only the good it creates while losing sight of the values it destroys.

STREET SCENES

Out of our accomplishments have grown comfort and satisfaction. No longer need we be cold

ARCTIC

because it is cold around us. Or hot because the

SUN

sun shines.

747 JET

We have machines to transport us in comfort.

THRESHING MACHINE

Machines to help us with our chores. Machines

SAILBOAT

to provide us with enjoyment. We would not

SCIENTIST

trade our tools and knowledge of today for any age that came before, and yet we are destroying ourselves.

MEADOWS

SMOKE STACKS

POLLUTED WATER

CHILD

TREES

SURFACE MINE

HOUSING PROJECT

CARL BAGGE
NATIONAL COAL ASSOC.
ON CAMERA

Perhaps we have gone too far in manipulating the elements of this environment. Before we can solve our environmental woes we must understand them. The more we know about it all the more effectively we can work to preserve it. Given enough time and money the polluted air and water can be cured. Yet the attacks on man's most precious gift -- the soil -- seem more dangerous than ever. We can no longer be prisoners of an onrushing technology. Obviously, mineral development and environmental management must go hand in hand, and it's about time that we decided they are mutually compatible. It is not too late to learn. There is no other choice.

BAGGE:

The only hope of extracting coal, and I might say, other mineral resources throughout the world to play the role that there expected to play in the future, is from surface mining methods. And it's not a dirty word. The public and indeed the world community has to be aware that this is a technology which is here to stay. It's a technology that has to be employed creatively to satisfy the needs of each nation in the world community. So, I say, it is the wave of the future in the extraction of the worlds mineral resources for the benefit of mankind. And those who would abolish it as a matter of national policy and indeed international policy, I have to say I regard as irresponsible.

And so a means has to be found to reconcile our new sensitivity for the earth and for restoring the earth, with the urgent new demand for coal -- the entire new look that

is being placed upon coal as a world resource to satisfy the tremendous energy requirements throughout the world in the future..

CAUDILL
ON CAMERA

CAUDILL:

We're going to have to learn to be conservationists every day and every hour of our lives, regardless of where we live. We're going to have to learn to be conservationists in the middle of the great cities as well as in the remote countries, the far out counties of the American countryside. We're going to have to turn off the lights and to put on sweaters, and to cook less frequently, and finally, I think that if the human race is going to continue to survive.

SCENES OF LAND
BEING TORN UP

CAUDILL: VO

Let's preserve the land for those that have not yet been born, but who are certain to need it. A generation or many generations after we go that's what my plea is. A plea for those who have not yet been born but are certain to arrive upon the scene needing all the things that we need, but barred from them because of the selfishness of our activities in our own brief span.

APPLE

(MUSIC)

SUPER CLOSING
CREDITS

VOICES FROM FILM: VO

All the land will eventually be strip mined.....

I'd like to see it put back but I guess only God could do that.....

But you can't put it back.....

They say there going to put the mountain back How can you put it back

A strip mine is forever.