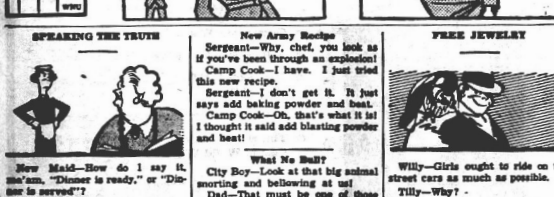


OUR COMIC SECTION

Tree Farming on Mined-Out Land
Answer to Coal Industry ProblemStripped Acreage Being
Turned Into Recreation
Centers by Foresters.

Forest operators have been called on by coal mine operators to provide the answer to one of the most annoying problems which beset the coal industry — what to do with mined-out land.

Tree-farming is proving to be the answer. The forest operators knew what it should be, because to a lesser degree they had a somewhat related problem, which new crops of trees have helped solve.

Coal miners call the devastated areas of land surface left by strip mining, "spoils." No word could be more fitting than "spoils" in the way the coal miners use it. After the strippers have finished, the earth surface looks to the public eye as if it had been plowed by blasts from

the appearance of the stripped acreage to the public eye does not happen to be agriculturally true. The fact is that the strip miners' steam shovels have turned up virgin soil which otherwise could never have been touched by plow nor have nourished a seed; aerated it by the shovels' action; and provided the tumbled earth by mixing through it broken-up limestone, and covered new surface contours which hold runoff water and raise the water level for the entire surrounding area.

Trees can turn these "spoils" into sections of recreational paradise, but until the foresters have done this, the public remains blithely ignorant of this.

The "spoils" can support vegetation, but the only plants passer-by see growing before the tree farmers go to work are jimson weed and an occasional volunteer brush. The shovelled-up earth is full of rocks that would defeat or break the strongest plow, and the ridges and depressions left by the shovels' turn over would exhaust livestock pastured there if acreage could be put to grass. Trees are an answer to this situation.

Strip mining is practiced in 21 states. Mine operators prefer to call it "open cut" mining. By whatever name, it is the oldest mining method. Aboriginal man doubtless first "black shovelled" his way to where he happened to light a fire on an outcrop. Then with his rude tools he forced the surface earth back to



Giant shovels not only strip the overburden and expose the coal.

because the ceilings of slate over these veins are so thin and crumbly that no mine timbering could support them.

In marginal land. Most of the ground which bears coal close enough to the surface to be strip mined is submarginal which government agricultural experts have been urging for years be taken from ordinary agriculture and put back into woodland. In Indiana its value before mining averaged only \$20 an acre in the nine southern counties where there is "open cut" mining. The college of agriculture at the University of Illinois rates grazing land on a score of from 1 to 10. "One" is top; 10 is impossible. Before the strippers went to work, the land they shovelled in that state was rated 5.5—barely par. When they got through it was rated 7.45—good enough to grow trees. The strippers' shovels damaged surface fertility, but did not destroy it.

Strip shovels do destroy the top humus. The deep fresh earth they bring up to replace it lacks nitrogen. If humus and nitrogen can be returned, the new soil, because it is virgin, will be better than the old. It has been overworked out by improper farming or bleached of its minerals by uncontrolled water. It has been enriched by minerals from below. Formerly below average on the rating scale, the land is now well above.

Trees are a regeneration of land and making parks out of waste. In Illinois alone, only one of the 21 strip-mining states, 7,500 acres of strip-mined land in 13 counties have been planted with 7,000,000 trees since 1930, and the rate of reforestation is increasing so that 2,000,000 trees

the tumbled-up earth as possible, as quickly as possible. If it were not for the need of layering humus on the soil the reforester might plant, except for black locust, hardwood trees at all. He would concentrate on the evergreens. For the conifers, members of the great pine family, will grow on land too poor to support any other kind of trees. Out of the first 5,000,000 trees planted by the "Open Cut Mining Industry of Illinois," 1,741,900 were black locusts, and 1,462,000 conifers. The needle-like leaves of the evergreen drop only every three or four years, but it is a continuous process. Their "dust" does not make as much humus as broad hardwood leaves, but it is a good humus.

Favorite conifers for strip "spoils" planting are those which are native to poor soils—such hard-needle evergreens as the Scotch pine, Norway spruce, and the red pine which struggles a gallant living out of the thin earth which veils the rocks of northeast Canada and the bleached hillsides of abandoned-farm New England and coal-country Pennsylvania.

Such species are grateful for the mineral food the strip miners' shovels have brought up from underground. They grow much more luxuriantly and rapidly on the "spoils" than they do on the untumbled land nearby, and far better than the evergreen plantings on the "spoils" of the 1930s are now 10 or 15 feet high, covering the steep-sloping banks of the lakes created by the shovelled-up contours. At least one observer is reminded by this reforested land of the Irish hills of Michigan and the forest-bordered lakes of the Adirondacks.

Forests Replaceable. The forest products industries are able to give the open-cut mine operators constructive aid and advice because they formerly faced a problem which, while not so grave, was similar. Early loggers looked on forests as a resource. They were mines. They were timber and coal are natural resources; the prime difference is that once coal has been mined it is gone, while forests are replaceable. Long ago loggers were faced by a triple economic problem:

First, land had to be cleared before it could be farmed. Woodcutters were the first pioneers, proud of their accomplishment when their axe lit light into the swamp. The life-giving sunlight without which corn could not grow.

Second, the country was in urgent need of hardwood for construction lumber, for fencing, and for fuel. In 200 years it took seven trillion hundred billion board feet of lumber to build this country.

And third, the pioneers were faced with seemingly endless mature forests. Only swift harvesting of some of them could save them from the deterioration of old age. As a matter of agricultural fact, this is still true of thousands of thousands of square miles of forestland in America. Harvesting virgin ponderosa pine has in some sections resolved itself into a race against the beetle, plague of these aged trees. Harvesting some stands of virgin Douglas fir is a race against internal tree decay. If we are to continue to have forests in those sections many old trees need to be removed so that a new young tree crop can grow.

Enough farm land was finally cleared. In some sections of the country, too much. Some harvested forestland proved unfit to farm. Trees were the natural and only useful crop these areas were good for. New England and southern loggers found themselves harvesting second and even third-growth trees. The incidence was inescapable. These trees were volunteer crops.

Trees can be grown over and over on the same land. Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

the tumbled-up earth as possible, as quickly as possible. If it were not for the need of layering humus on the soil the reforester might plant, except for black locust, hardwood trees at all. He would concentrate on the evergreens. For the conifers, members of the great pine family, will grow on land too poor to support any other kind of trees. Out of the first 5,000,000 trees planted by the "Open Cut Mining Industry of Illinois," 1,741,900 were black locusts, and 1,462,000 conifers. The needle-like leaves of the evergreen drop only every three or four years, but it is a continuous process. Their "dust" does not make as much humus as broad hardwood leaves, but it is a good humus.

Favorite conifers for strip "spoils" planting are those which are native to poor soils—such hard-needle evergreens as the Scotch pine, Norway spruce, and the red pine which struggles a gallant living out of the thin earth which veils the rocks of northeast Canada and the bleached hillsides of abandoned-farm New England and coal-country Pennsylvania.

Such species are grateful for the mineral food the strip miners' shovels have brought up from underground. They grow much more luxuriantly and rapidly on the "spoils" than they do on the untumbled land nearby, and far better than the evergreen plantings on the "spoils" of the 1930s are now 10 or 15 feet high, covering the steep-sloping banks of the lakes created by the shovelled-up contours. At least one observer is reminded by this reforested land of the Irish hills of Michigan and the forest-bordered lakes of the Adirondacks.

Forests Replaceable. The forest products industries are able to give the open-cut mine operators constructive aid and advice because they formerly faced a problem which, while not so grave, was similar. Early loggers looked on forests as a resource. They were mines. They were timber and coal are natural resources; the prime difference is that once coal has been mined it is gone, while forests are replaceable. Long ago loggers were faced by a triple economic problem:

First, land had to be cleared before it could be farmed. Woodcutters were the first pioneers, proud of their accomplishment when their axe lit light into the swamp. The life-giving sunlight without which corn could not grow.

Second, the country was in urgent need of hardwood for construction lumber, for fencing, and for fuel. In 200 years it took seven trillion hundred billion board feet of lumber to build this country.

And third, the pioneers were faced with seemingly endless mature forests. Only swift harvesting of some of them could save them from the deterioration of old age. As a matter of agricultural fact, this is still true of thousands of thousands of square miles of forestland in America. Harvesting virgin ponderosa pine has in some sections resolved itself into a race against the beetle, plague of these aged trees. Harvesting some stands of virgin Douglas fir is a race against internal tree decay. If we are to continue to have forests in those sections many old trees need to be removed so that a new young tree crop can grow.

Enough farm land was finally cleared. In some sections of the country, too much. Some harvested forestland proved unfit to farm. Trees were the natural and only useful crop these areas were good for. New England and southern loggers found themselves harvesting second and even third-growth trees. The incidence was inescapable. These trees were volunteer crops.

Trees can be grown over and over on the same land. Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

Where seed trees have been left in cut-over areas, natural replanting with fire protection provided adequate new crops. But in some areas fire, erosion, or other causes have destroyed natural seed sources, young growth and the surface fertility of the soil. This was particularly true of abandoned stamplands. Fires had swept through the waste litter and dead snags left behind when the merchantable timber was taken out. This had destroyed the humus.

CLASSIFIED
DEPARTMENT

SALESMEN

SALSMEN—Famous Harper line men's suits, shirts and underwear, new styles, guaranteed 100% from Harper's 1475, 15th St., N.W., Atlanta, Ga.

RAZOR BLADES

KENT BLADES—The outstanding razor blades. Sold by all dealers.

When armored knights met, it was customary for each knight to raise the visor of his helmet as a means of identification. This gesture has come down through all armies in the form of the salute. Traditional, too, is the Army man's preference for Camel Cigarettes. In the Army, Navy, Marines, and Coast Guard, actual sales records in their Service Stores show Camel is the favorite. Favorite gift with service men is also Camels by the carton. Local tobacco dealers are featuring Camel cartons to send to men in the armed forces anywhere.—Adm.

NOTHING CAN DO
MORE FOR YOU

In the entire field of aspirin that St. Joseph's Aspirin, New York, has made. The world's largest seller of aspirin in economy sizes—36 tablets, 50, 100 tablets, 250, 500, 1000, 2000, 5000, 10000.

Plant Walks Like Man. The roots of the Cactus Arbutus, found on the Peru coast, are actually feet and legs. The plant walks over the surface of the arid desert with the aid of the wind, gets water from the damp night air, and food from the saline surface.



Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

Whoever the Quinaplets catch cold—your chest, throat and back are immediately relieved with Quinaplets. It's what you need to get your child's cold relief you can buy!

Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

Whoever the Quinaplets catch cold—your chest, throat and back are immediately relieved with Quinaplets. It's what you need to get your child's cold relief you can buy!

Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

Whoever the Quinaplets catch cold—your chest, throat and back are immediately relieved with Quinaplets. It's what you need to get your child's cold relief you can buy!

Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

Whoever the Quinaplets catch cold—your chest, throat and back are immediately relieved with Quinaplets. It's what you need to get your child's cold relief you can buy!

Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

Whoever the Quinaplets catch cold—your chest, throat and back are immediately relieved with Quinaplets. It's what you need to get your child's cold relief you can buy!

Quinaplets. This cold-relief used when QUINAPLETS CATCH COLD.

DOANS PILLS

