Another necessary measure will involve the restoration of plant life in the zone adjoining the embankment and water drainage. Where uneven sagging or "mari" [shallow, often hummocky, bogs] occur, drainage ditches and shoulders often subside and are covered by water. The water, like the mineral soil on the surface, warms in summer several times more intensively than a shaded "mar'". Engineers have long known the benefit of strewing peat to prevent thawing, a procedure in fact recommended under the above conditions. As a rule, however, builders fill up low spots with anything they like, except peat. They use earth and gravel from open quarries, that is, stones with fine soil and clay. Quite a presentable picture results for the State inspection commission, but as little as a year later everything begins to cave in and drown because the thawing boundary has retreated several metres downward. The viscous mud on which the embankment stands, spreads far and wide.

Who can profit from disregarding scientific recommendations? Certain people, it turns out, can indeed profit:

a) the design institute, in order to cover up mistakes in its work;

b) the general contractor, to hide the mutilation of a "mar'" by heavy equipment laying embankments and putting in drains, bridges and other structures.

Thus, the Uralgiprotrans [Urals Main Institute for Transportation Design] Institute on the Tungala-Fevral'sk track section, which is now being put into operation, did not specify culverts in all