



to. Be that as it may, I am glad I shall never be young without wild country to be young in. Of what avail are forty freedoms without a blank spot on the map?

Leopold, Aldo (1949) *Song of the Gavilan in A Sand County Almanac*.

Song of the Gavilan

The song of a river ordinarily means the tune that waters play on rock, root, and rapid.

The Rio Gavilan has such a song. It is a pleasant music, bespeaking dancing ripples and fat rainbows laired under mossy roots of sycamore, oak, and pine. It is also useful, for the tinkle of waters so fills the narrow canyon that deer and turkey, coming down out of the hills to drink, hear no footfall of man or horse. Look sharp as you round the next bend, for it may yield you a shot, and thus save a heart-breaking climb in the high mesas.

This song of the waters is audible to every ear, but there is other music in these hills, by no means audible to all. To hear even a few notes of it you must first live here for a long time, and you must know the speech of hills and rivers. Then on a still night, when the campfire is low and the Pleiades have climbed over rimrocks, sit quietly and listen for a wolf to howl, and think hard of everything you have seen and tried to understand. Then you may hear it—a vast pulsing harmony—its score inscribed on a thousand hills, its notes the lives and deaths of plants and animals, its rhythms spanning the seconds and the centuries.

The life of every river sings its own song, but in

most the song is long since marred by the discords of misuse. Overgrazing first mars the plants and then the soil. Rifle, trap, and poison next deplete the larger birds and mammals; then comes a park or forest with roads and tourists. Parks are made to bring the music to the many, but by the time many are attuned to hear it there is little left but noise.

There once were men capable of inhabiting a river without disrupting the harmony of its life. They must have lived in thousands on the Gavilan, for their works are everywhere. Ascend any draw debouching on any canyon and you find yourself climbing little rock terraces or check dams, the crest of one level with the base of the next. Behind each dam is a little plot of soil that was once a field or garden, sub-irrigated by the showers which fell on the steep adjoining slopes. On the crest of the ridge you may find the stone foundations of a watch tower; here the hillside farmer probably stood guard over his polka-dot acrelets. Household water he must have carried from the river. Of domestic animals he evidently had none. What crops did he raise? How long ago? The only fragment of an answer lies in the 300-year-old pines, oaks, or junipers that now find rootage in his little fields. Evidently it was longer ago than the age of the oldest trees.

The deer love to lie on these little terraces. They afford a level bed, free of rocks, upholstered with oak leaves, and curtained by shrubs. One bound over the dam and the deer is out of sight of an intruder.

One day, by aid of a roaring wind, I crept down upon a buck bedded on a dam. He lay in the shade of a great oak whose roots grasped the ancient mas-

onary. His horns and ears were silhouetted against the golden grama beyond, in which grew the green rosette of a mesquite. The whole scene had the balance of a well-laid centerpiece. I overshot, my arrow splintering on the rocks the old Indian had laid. As the buck bounded down the mountain with a goodbye wave of his snowy flag, I realized that he and I were actors in an allegory. Dust to dust, stone age to stone age, but always the eternal chase! It was appropriate that I missed, for when a great oak grows in what is now my garden, I hope there will be bucks to bed in its fallen leaves, and hunters to stalk, and miss, and wonder who built the garden wall.

Some day my buck will get a .30-30 in his glossy ribs. A clumsy steer will appropriate his bed under the oak, and will munch the golden grama until it is replaced by weeds. Then a freshet will tear out the old dam, and pile its rocks against a tourist road along the river below. Trucks will churn the dust of the old trail on which I saw wolf tracks yesterday.

To the superficial eye the Gavilan is a hard and stony land, full of cruel slopes and cliffs, its trees too gnarled for post of sawlog, its ranges too steep for pasturage. But the old terrace-builders were not deceived; they knew it by experience to be a land of milk and honey. These twisted oaks and junipers bear each year a crop of mast to be had by wildlings for the pawing. The deer, turkeys, and javelinas spend their days, like steers in a cornfield, converting this mast into succulent meat. These golden grasses conceal, under their waving plumes, a subterranean garden of bulbs and tubers, including wild potatoes. Open the crop of a fat little Mearns' quail and you

find an herbarium of subsurface foods scratched from the rocky ground you thought barren. These foods are the motive power which plants pump through that great organ called the fauna.

Every region has a human food symbolic of its fatness. The hills of the Gavilan find their gastronomic epitome in this wise: Kill a mast-fed buck, not earlier than November, not later than January. Hang him in a live-oak tree for seven frosts and seven suns. Then cut out the half-frozen 'straps' from their bed of tallow under the saddle, and slice them transversely into steaks. Rub each steak with salt, pepper, and flour. Throw into a Dutch oven containing deep smoking-hot bear fat and standing on live-oak coals. Fish out the steaks at the first sign of browning. Throw a little flour into the fat, then ice-cold water, then milk. Lay a steak on the summit of a steaming sour-dough biscuit and drown both in gravy.



This structure is symbolic. The buck lies on his mountain, and the golden gravy is the sunshine that floods his days, even unto the end.

Food is the continuum in the Song of the Gavilan. I mean, of course, not only your food, but food for the oak which feeds the buck who feeds the cougar who dies under an oak and goes back into acorns for his erstwhile prey. This is one of many food cycles starting from and returning to oaks, for the oak also feeds the jay who feeds the goshawk who named your river, the bear whose grease made your gravy, the quail who taught you a lesson in botany, and the turkey who daily gives you the slip. And the common end of all is to help the headwater trickles of the Favilan split one more grain of soil off the broad hulk of the Sierra Madre to make another oak.

There are men charged with the duty of examining the construction of the plants, animals, and soils which are the instruments of the great orchestra. These men are called professors. Each selects one instrument and spends his life taking it apart and describing its strings and sounding boards. This process of dismemberment is called research. The place for dismemberment is called a university.

A professor may pluck the strings of his own instrument, but never that of another, and if he listens for music he must never admit it to his fellows or to his students. For all are restrained by an ironbound taboo which decrees that the construction of instruments is the domain of science, while the detection of harmony is the domain of poets.

Professors serve science and science serves progress. It serves progress so well that many of the more in-

tricate instruments are stepped upon and broken in the rush to spread progress to all backward lands. One by one the parts are thus stricken from the songs of songs. If the professor is able to classify each instrument before it is broken, he is well content.

Science contributes moral as well as material blessings to the world. Its great moral contribution is objectivity, or the scientific point of view. This means doubting everything except facts; it means hewing to the facts, let the chips fall where they may. One of the facts hewn to by science is that every river needs more people, and all people need more inventions, and hence more science; the good life depends on the indefinite extension of this chain of logic. That the good life on any river may likewise depend on the perception of its music, and the preservation of some music to perceive, is a form of doubt not yet entertained by science.

Science has not yet arrived on the Gavilan, so the otter plays tag in its pools and riffles and chases the fat rainbows from under its mossy banks with never a thought for the flood that one day will scour the bank into the Pacific, or for the sportsman who will one day dispute his title to the trout. Like the scientist, he has no doubts about his own design for living. He assumes that for him the Gavilan will sing forever.