

LET'S SAVE WATER

Note on "Ion Exchange Process for Brackish Waters" (World Wide Chemistry), Chemical and Engineering News, p. 3306, Vol. 27, No. 45, Nov. 7, 1949.

"The world is becoming increasingly aware of shortages of a raw material once thought inexhaustible, i.e., fresh water. There are a number of regions, such as Los Angeles, Cal., Perth, Australia, Johannesburg, South Africa, and Tel Aviv, Israel, where large population densities combined with small annual rainfall give rise to situations where the future economic development is limited by the fresh-water supply".

The article describes several possible methods and costs of demineralization of brackish water and states, "Although the maximum present-day water cost for very highly valued crops is 30 cents per 1,000 gallons, a more reasonable maximum figure for moderate-scale agricultural uses is 10 cents per 1,000 gallons".

Notes on "We're Running Out of Water" by Pat Frank, This Week Magazine, p. 5, Nov. 6, 1949.

This article points up the alarming water shortage in a dramatic way. Scientists say that 1957 is the critical date when action will have to be taken if new sources of fresh water are not found. The article stresses the possibilities of tapping the oceans for fresh water and says that the Department of the Interior has asked Congress for 50 million dollars to find a way to obtain fresh water from the sea. The author says, "Hundreds of thousands of acres of irrigated lands are being kept in production only through serious over-pumping of the existing water supply . . .

"The water levels of the reservoirs that feed Louisville and Indianapolis have dropped 40 and 50 feet, respectively.

"But the most critical areas are the great, expanding metropolitan districts of the nation where the population is jumping, constantly stepping up the use of water".

The article describes methods of purifying salt water, including the possible

use of atomic energy, and ends with this thought:

"There is no greater gift this country could give the earth than the perfection of techniques for transforming the sea into fresh water. And for our own good, we'd better do it soon!"

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The growing scarcity of fresh water is not an idle threat; it is real. Two recent references have been abstracted here to indicate the trend of thinking. To cite other references would serve no useful purpose.

During the educational turf conferences of the winters 1948-49 and 1949-50, USGA Green Section personnel stressed repeatedly the need for saving water on turf areas. Since 1945, Green Section research has been directed toward a program of growing the best turf possible with the minimum of artificial irrigation, using every known device such as: (1) Aeration of the soil to improve porosity and absorption and to reduce runoff; (2) More adequate fertilization to produce denser turf, which is the best-known method of saving water; (3) Emphasis on the turf grasses which have low-water requirements and high drought-tolerance.

The Green Section expresses its considered opinion that funds for agricultural research may be used justifiably for turf research which is directed toward *saving water*. It is well known that, even in areas where water shortages are becoming critical, many turf areas regularly are overwatered. Agricultural and industrial interests should welcome the opportunity to support this phase of turf research because the savings in water largely will accrue to the benefit of agriculture and industry.

We do not limit our thinking and our planning to golf-course turf; we include *all* turf areas. We subscribe to the policy that the *best* turf for all purposes is that which is maintained with only sufficient water to keep it alive.