

Something New in Conservation

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The subject of conservation has commanded much of public attention in recent years, and justly so because the loss or waste of any of the resources, the welfare of the nation depends upon is a most serious matter. Every effort to protect our fuel supply or our lumber supply has therefore met with instant and hearty approval. Our national water supply, however, does not seem to have received the consideration its importance deserves. Laws have been enacted to guard its use for the production of power, but its importance and use in the production of our annual crops seems to have been overlooked. No doubt largely because our crops have been so ample for our own use in the past, we have taken it for granted they would always be. The "great farm" from which 75 to 80 per cent of our present food supply comes lies between the Alleghany mountains on the east and the Rocky mountains on the west. This vast body of very fertile land is watered by rainfall and drained by the Mississippi river. Our food supply for the future depends absolutely upon the intelligent and careful use of the soil and water supply nature has here provided. Is it not clear therefore that our most important conservation problem is protection against waste of this soil fertility and water supply? How important in fact, how imperative, it is, can be appreciated more easily by comparing our crop necessities with our population increase. Note our wheat crop. Our present population requires 650,000,000 bushels for bread and seed. Because of increasing population the wheat crop must increase 10,000,000 to 12,000,000 bushels each year. In fifteen years therefore, our wheat crop must exceed 800,000,000 bushels. This is many millions more than we have ever raised, and it must be remembered other crops must show the same increase as wheat. We cannot depend upon developing new land to increase our crops, because we haven't it to develop. Irrigation and reclamation will help some, but they are so expensive farmers cannot raise wheat at the price the public demands, so more profitable crops must be raised on such land. This being true the land already under cultivation must produce more. Our great "national" farm mentioned above is so large that crop conditions are not uniform over all parts of it. The altitude varies from almost sea level to a mile high; temperature varies from quite warm to quite cool; rainfall is excessive east, and deficient west. Cotton grows best south, corn best in the central and wheat best in the north and western parts. From the mouth of the Mississippi river north and east to the Alleghany mountains, the rainfall is excessive, ranging from 35 to 60 inches. To produce maximum crops in this territory the land must be surface drained. This has been done so largely that the crop production has almost reached its maximum. Any material increase in crops cannot reasonably be expected from this territory. Surface drainage has developed another serious national problem, that is, flood control in the Mississippi river. Surface drainage has so greatly increased the volume of flood water in the Mississippi river the national government is using its resources to prevent floods from destroying crops and even life. Many millions of dollars have been spent building dykes, and many millions more must be spent to insure ample protection against floods so that development may be encouraged and made secure. These facts lead inevitably to the western part of our great national farm for the increase in food supply our nation must depend upon. Here the annual rainfall averages from 10 to 25 inches, decreasing toward the west and north. This vast body of fertile soil because of deficient rainfall is prevented from producing maximum crops. It is settled by as industrious, honest and worthy farmers as are to be found in the world. Unlike the lumber and mining industries, this land is in the hands of individuals. Profits in farming are not great enough apparently to attract our great corporations into this field of industry, therefore, the individual farmer must be reckoned with in every effort made to increase crop production. Experience proves beyond a doubt that if the rainfall received in this territory could be supplemented by more moisture, crops would not only be larger

but could be depended upon every year. The deficiency in this territory ranges from 5 to 15 inches, but the great value of the rainfall here depends upon supplemental moisture to equal this deficiency. Can this extra water be found? Let us see. The Rocky mountains to the west gather snow every winter in immense quantities, the spring sunshine turns it into water, and gravity leads it by the way of innumerable streams down through this land where it is so badly needed, but instead of its being utilized as it should be, it is actually permitted to pass this land and go on down to join in the Mississippi river other flood waters from the east and add to the difficulty and expense of flood control there.

It is ample in quantity and can be depended upon every spring. Apparently nature has intended it for supplementing the rainfall in this territory. The soil and the sub-soil in this territory varies from 50 to 150 feet deep in mostly a light clay, capable of holding 15 to 17 per cent of its weight of water. What a wonderful reservoir nature has thus provided, so cheap and so convenient, just as the mountains and snow are provided. All man must do is lead it from the streams out upon the great divides and let it soak into the sub-soil where it is ready for plant use. The character of this soil is such, it will take this water any time during the year and hold it as film water until plant roots consume it. Laboratory experiments, field experiments as well as the experience of farmers, all conclusively prove this to be true, the very driest years farmers find spots in their fields where snow has accumulated in drifts during the winter in the spring melting sinks into the sub-soil, and wheat or corn that happens to be planted on these spots grow luxuriantly and mature perfect grain when all the rest of the field would wither and die. Such instances are not rare, but they prove that moisture stored in the sub-soil will insure generous crop production.

These facts have lead the farmers in Kearney, Phelps and Gosper counties, Neb., lying immediately south of the Platte river, who have been compelled to see this water pass their farms every spring unused and join in the Mississippi river other flood water to become a public menace. They believe sincerely the national government should become as interested in the wise use of this water where needed as it is in preventing it from destroying crops and life where it is excessive. Hence the united effort of the farmers in these counties to induce the national government to make a survey and to determine the feasibility of digging canals to lead it out on the prairies where it can be stored in the sub-soil. Such a survey is about to be made by the national government in conjunction with state officials. These farmers are thoroughly convinced it is entirely feasible as well as practical, because the great prairies through which these streams flow are only 40 to 100 feet above the bed of the stream, and they slope toward the Mississippi river the same as the streams do. The soil contains no rocks nor trees to make digging difficult, and unlike dykes the canal once dug is not liable to be washed away, but will become a permanent avenue to lead the water out into nature's reservoir.

Such a canal will serve many times as many acres as an irrigation canal, because it would not be called upon to furnish water during the crop growing period, and thus be limited to just the acres its capacity could serve at such a time. This canal would take flood water whenever and all the time it is going to waste, would carry it out to soak into the sub-soil, and thus would be storing water night and day for weeks and often months at a time. As the sub-soil would become amply supplied, its territory could be enlarged, because the more sub-soil it could fill with this waste water, the more valuable this canal would become, it being so unlike the irrigation canal the capacity and service of the irrigation canal would not apply in trying to estimate either the capacity or ability to serve of the canal for supplementary water purposes. To obtain correct and necessary data regarding such a canal, one must be constructed and tried.

Such a canal can be quickly constructed and at reasonable cost; it would show how much land could be served, the cost of serving, and the value of this flood water that flows down these

streams after all irrigation reservoirs are full and can hold no more.

After the first canal is dug, comprehensive and definite plans can be made to systematically use all of the flood and snow water that these streams where rainfall is deficient could furnish. Every drop of this water is valuable and should be used. This becomes doubly desirable when it is seen that by using it over one-third of the flood volume of the Mississippi river would be permanently taken care of, making it possible to reclaim and make productive millions of acres in the Mississippi river bottom. It must be apparent, however, that this like flood control is a national problem, so many states are involved and such conflicting interests regarding the use of water. There is certainly nowhere the national government can bring about such necessary and wonderful results so quickly, and that will be of such universal benefit. This is especially true because the public is demanding lower prices for its food supply. It is apparent the public is more deeply interested in lower prices than the farmer is, and it would seem the only way to permanently reduce prices is to make our annual crops larger. For instance—an 800,000,000 bushel wheat crop marketed by the farmer at 70 cents per bushel would bring him \$560,000,000. On the other hand a 700,000,000 bushel wheat crop marketed by the farmer at 80 cents a bushel, would bring him exactly the same amount. The difference being the farmer would haul to market 100,000,000 bushels of wheat, because of the large crop, and get nothing more for it, and the consumer would get 100,000,000 bushels more wheat at no more money cost. All farm crops are influenced by these same conditions. The larger the crop, the less the price. The farmers gain being the reduction of the risk in crop production and his having crops to sell every year. Good crops therefore every year, mean universal prosperity, a condition of greatest importance to the entire nation. This condition is within our reach, it can be brought about by the wise and careful use of our soil fertility and our national water supply.

The standpat republican state committee of Nebraska met the other day in Lincoln in the same hotel with the progressive republican state committee in a futile attempt to get together. Apparently Nebraska republican leaders have never heard of the lack of success that followed previous attempts to get water and oil to mix.

In a recent after dinner speech Chauncey Depew declared that Americans are losing their sense of humor. Perhaps Chauncey might change his mind if he would try a few new stories on his auditors.

A Japanese cabinet has been dissolved because of the discovery of graft. This will give renewed assurance to those who have insisted that the Japs are great imitators of republican institutions.

SONGS OF NIGHT

The moon sings low in the sky above,
And the twinkling stars shine bright,
And a mother sings to her baby love
Those wonderful songs of night;
Those wonderful songs of sugar plum trees,
And fields where the fairies play,
Of cockle-shell boats on golden seas
That never are seen by day.

It is by-low time and she sweetly hums
Those wonderful songs of night;
Of the blare of trumpets and sounds of drums
When the little tin soldiers fight;
She sings of a comical candy dog
And the gingerbread man who stands
By the side of a blinking cooky frog,
Without any arms or hands.

And the moonbeams dance on the parlor floor,
And a ship sets out at sea,
And a baby sails for the golden shore
In search of the sugar plum tree:
She's off to the cave of the Teddy Bear,
And the haunts of the fairies kind,
No thoughts of tomorrow's worries
Shall trouble her baby mind.

Oh, sweet is the smile on the baby face
As she softly sinks to rest
And if ever a song can reach the skies,
The angels must find delight
In hearing a mother's lullabies—
Those wonderful songs of night.

—Houston Post.