

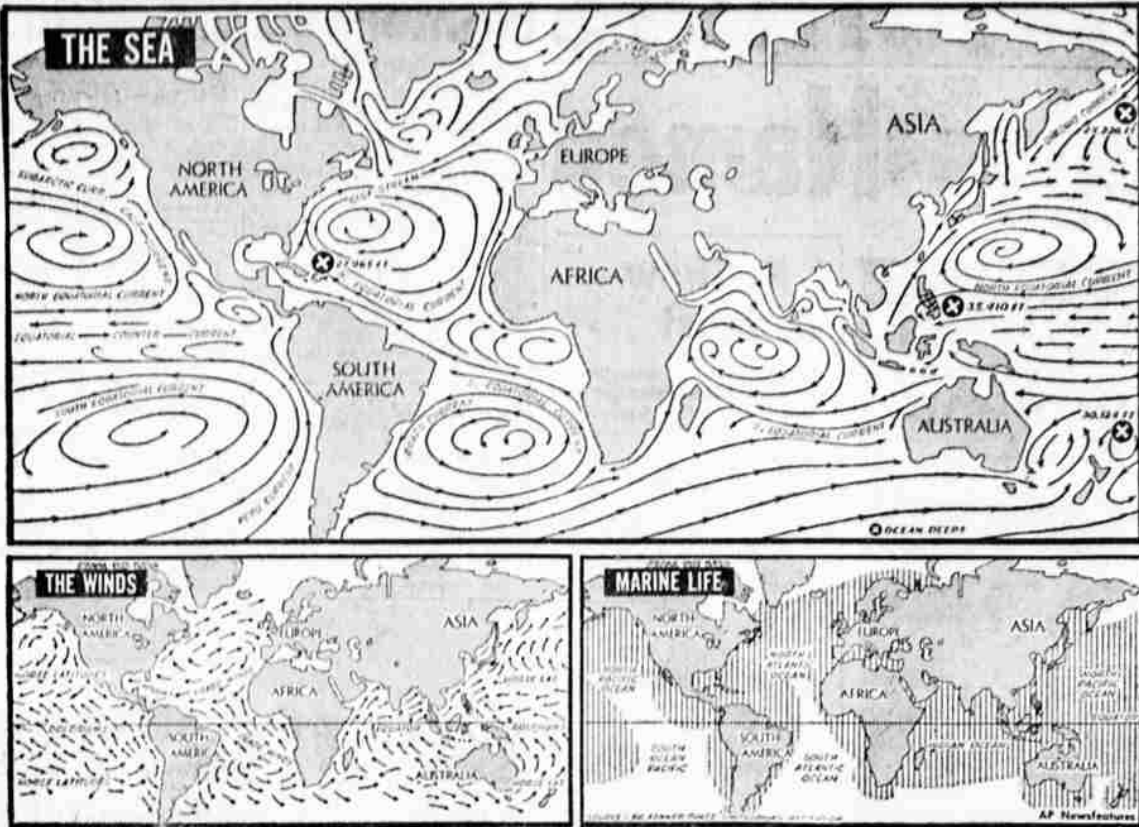
The Sea Around Us Is A New Scientific Frontier

Farms Use Many Posts

Deans to Aid S. Americans

ber of the state board of forestry and director of the Oregon forest products laboratory on the OSC campus.

Dean Price is recognized as a pioneer leader in sprinkler irrigation in Oregon and the northwest—a development that has blossomed into a nationwide movement. He has conducted extensive research on sprinkler irrigation since 1919 and has written numerous bulletins on this and other agricultural engineering subjects.



By FRANK CAREY
Associated Press Science Reporter

Military and civilian scientists are studying constantly a substance that covers three quarters of the surface of the planet—the waters of Mother Sea.

They are seeking new knowledge of the nature, make-up and actions of the sea so as to (1) increase the efficiency and safety of fighting craft and merchant vessels, (2) help fishermen increase their catches and (3) perhaps wrest new mineral treasures from the deep.

They study the microscopic plant and animal life of the sea for fighting tips and take samples of ocean bottom silt in their search for minerals. They study temperature and salt content of different areas for possible help in charting surface and subsurface currents with greater accuracy. They study the transmission of sound through oceanic waters in mostly hush-hush research aimed at strengthening the nation's security.

Out of the first 10 miles or so of the atmosphere—under the influence of the sun, the earth's rotation and other forces—come the great winds that are important in man's life, especially the "trade winds" and the "prevailing westerlies," which activate the great currents—the main highways—of the seas.

Air winds—prevailing and intermittent—are produced by differences of temperature. In general air near the earth's surface tends to flow from areas of high pressure towards those of low pressure, resulting in winds.

The sun's heat at the equator causes surface air there to rise constantly and be replaced by air coming in from cooler areas on both sides of the equator.

The surface air moving towards the equator from the high pressure areas above and below it constitutes the two trade winds—the northeast trades in the northern hemisphere and the southeast trades in the southern hemisphere. The trade winds blow from north and south latitudes 30 to 35 degrees towards the equatorial belt of low pressure.

The rotation of the earth makes them blow northeasterly and southeasterly rather than due north or south.

On the polar sides of the high-pressure belt in each hemisphere, you also have diminished atmospheric pressure—resulting in a tendency of surface air to flow towards the poles in each hemisphere. This causes the prevailing westerlies of the two hemispheres. Once again the earth's rotation enters in, resulting in prevailing westerly winds in the northern hemisphere and prevailing northwesterlies in the southern.

Finally come the "polar easterlies" of both north and south latitudes. At the equator, between the two

systems of trade winds, is an area of calms—called the "doldrums." Between the prevailing westerlies and trades in either hemisphere are areas of relative calm known as the "horse latitudes" or the "calms" of Cancer and Capricorn.

The pattern of the winds differs somewhat in winter and summer, largely because of changes in temperature.

The trade winds as a rule cause currents from east to west. Under their influence—directly or indirectly—we have the North Equatorial Current, the South Equatorial Current, the Humboldt Current, the Benguela Current, the California Current and the Canary Current.

The prevailing westerlies along with the trades influence the Japan Current and the Gulf Stream, but the trades are the chief factor.

In general, besides their importance to shipping, all currents have important effects on climate. They influence cloudiness, storminess, rainfall and temperatures of the atmosphere overlying the oceans and nearby continental areas.

"Fauna" of the sea includes such things as fish, shelled creatures, worms, jelly-fish, tiny copepods. The map tabbed Marine Life outlines the boundaries of the littoral faunal areas—that is, those fairly close to shore as distinguished from the broad open sea.

Fish from the same general family (for example, the herring) may occupy water in virtually any part of the world. But the species of herring will differ from place to place. The same is true for the various shelled creatures, for the tiny "sea squirts," for the tiny anemones which have tentacles around their mouths, for sponges and all other fauna.

Temperature of the water is a big factor in influencing the establishment of particular species in particular places. Also, areas which

are quite isolated from others are more likely to develop their own particular species of fauna than areas close to one another. In the latter case, intermingling of species is more likely.

In general, fish in tropical areas are highly-colored examples: butterfly, angel, cardinal, parrot, snapper. Their coloring is nature's protective camouflage to help the fish blend with the brilliant, varicolored tropical marine background.

In more temperate areas, "typical" fish would be:

North Pacific: Salmon, halibut, sole, sculpin, rockfish.

North Atlantic: Herring and anchovies, striped bass, cods, flounders.

The Mediterranean-Atlantic area is largely tropical in character as far as fauna is concerned.

Antarctic: Very little in the fish department in fact virtually the only variety is a non-descript article called the "neothoid."

Arctic: Cods, sculpin, whitefish, smelt.

The bottom of the sea varies. Surrounding each of the huge continental land masses is a type of floor known as terrigenous. It is composed of material borne to the ocean by rivers, winds and floating ice as well as wrested from coastlines by waves, tides and oceanic currents.

Other types of ocean floor include coralline, made up of coral deposits; pteropod ooze, composed of mollusk shell fragments; diatom ooze, composed of the remains of marine algae; and radiolarian ooze, the remains of radiolaria, which have tiny leg-like organs radiating from their bodies.

Telling the Editor

PROTEST

Dear Sir:

I have some gripes to air to people here and elsewhere who make daily remarks about Arkansas without knowing what they are talking about.

I tune in on the radio to hear a little music to cheer me up and to kindle take my mind off world affairs and what do I hear? If someone selects a western song or one with fiddling and old time singing someone says, "I wish you wouldn't play songs like that; only hillbillies from Arkansas or Oklahoma would request such songs."

Well, I have never requested songs or been in on their fights over the air. I think those songs sound just about as good as such songs as "Rock of Gibraltar" or "Lover," but I feel like that is up to the individual's taste what they select. I resent people who call us hillbillies and make remarks about our state. It seems there are ignorant people somewhere besides Arkansas and Oklahoma. We have been taught to respect people's feelings and if we ever made fun of anyone there was always a peach tree or a maple handy that needed trimming.

We aren't cave people either; we love people and are kind and friendly when people will let us be friendly.

I have walked down the streets here and smiled at someone and they look at me as if I were out of my mind. "Well I am not," I just try to be nice and what do I get but a grim faced look. E. W.

Search Started

ROSEBURG (AP)—Drugging operations started here Wednesday for the body of Harry A. Whitson, 65, of Dillard.

He is believed to have drowned Monday in the South Umpqua River while swimming. His clothes and a towel were found on the river's bank.

Oregon State College — Two deans at Oregon State college have accepted invitations of South American governments for technical assistance in forestry and agriculture.

Paul M. Dunn, dean of forestry, will leave late in July for Santiago, Chile, where he will spend a year organizing a school of forestry at the University of Chile.

F. E. Price, dean of agriculture, will spend two or three months in the fall on invitation of the government of Sao Paulo assisting that Brazilian state with its irrigation program.

JOINT PROGRAM

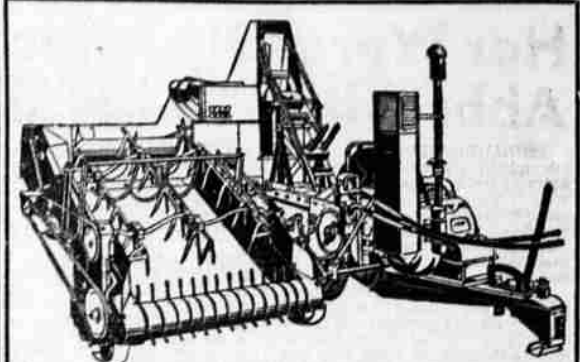
Dean Dunn's assignment is a joint program of the food and agriculture organization of the United Nations and the government of Chile. In addition to setting up a school of forestry Dean Dunn will advise on forestry facilities and do some instructional work. His duties will require extensive travel throughout Chile.

Dean Price will work with Sao Paulo technicians in that government's sprinkler irrigation program. He will help organize intensive training courses and assist local specialized organizations in planning their work.

Dean Dunn for 10 years is nationally known in forestry education and was recently elected president of the national Council of Forestry School Executives. He previously served for a number of years on the executive council of the Society of American Foresters and is now a member of the society's accrediting committee.

BACKGROUND

He is chairman of the state Keep Oregon Green Program, a mem-



The Minneapolis-Moline Bale-O-Matic, the completely automatic wire-tie baler that produces square bales in a wide range of adjustable weights and lengths.

Check the Features!

Plunger crankshaft has TWO main bearings. Wire unrolls from outside of spool to inside, controlled by automatic brakes. Feeds evenly. No tangling or kinking. Exclusive pickup and raker bar feed lifts hay from windrow and conveys it over solid feeder floor with minimum loss of leaves. NO slots in feeder floor or housing through which leaves or hay can be lost.

Engine situated far forward on machine. Keeps engine out of heavy chaff and dirt, prevents overheating. Eliminates danger of fire.

ABSOLUTELY NO TIMING ADJUSTMENTS ON THIS BALER. Machine CANNOT get out of time. Minimizes complexity of operation.

Because machine parts can operate independent of one another (not timed to one another) it is possible to use slip clutches in vital spots on the machine. The M-M Bale-O-Matic has shear bolts PLUS three slip clutches, resulting in minimum breakage of parts.

Uses heavy 14-gauge wire which will stand up under heaviest baling conditions. Lasts longer and remains stronger under rusting conditions. Featuring only one knot to each strand, the Minneapolis-Moline knot CANNOT come undone.

All-welded steel bale chamber, heavy-duty construction throughout. The Bale-O-Matic weighs nearly a full ton more than most other balers in its price class! Typical of the added quality you can expect from Minneapolis-Moline.

Backed by unequalled service and parts guarantees. The preferred baler of Klamath Basin Farmers!



BYRON JOHNSON

"Your Minneapolis-Moline Dealer"

Brillion Sure-Stand Grass Seeders — Merrill Rakes
Linton Cattle Chutes
Tulare Bale Loaders — Cobey Manure Spreaders
Iron Age Potato Planters and Diggers
Merrill-Lakeview Junction — Phone 9789
Malin — Phone 309

BULL SERVICE

Whiteface
Registered Hereford
Phone CECIL DREW 3924

Employment At Record High

WASHINGTON (AP)—More Americans had jobs in June than in any previous June on record—63,572,000.

The Census Bureau, reporting this Tuesday said the figure was only 60,000 below the all-time record set in August, 1951.

The Bureau said the employment picture was much brighter, with 769,000 more jobs openings last month than for June a year ago. Most of the new opportunities were on farms.

Tulelake City Budget Okayed

TULELAKE—The new city budget for the fiscal year beginning July 1, accepted by the city council Monday night was for \$76,000. The total covers all city departments with little change over the 1951 budget.

Present were Mayor Rolland Rinabarger and Councilmen Virgil Barron, William Seigler and Ross Ragland. Al Porter was out of town.

SHIP DUE

SEATTLE (AP)—The vessel M. M. Patrick will arrive here Thursday from the Far East with 635 passengers who embarked there and 50 Navy personnel from Adak.

Let 'Butch'

cut and wrap your beef
and pork for your locker
And we still cure your hams and bacon

SMOKE HOUSE

427 Market A. G. "Butch" Zweigert Klamath Falls Phone 7060

Increase POTATO yield



with... SHELL NH₃

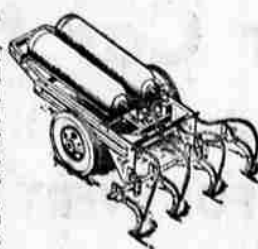
Either way you use it, you're sure it's applied scientifically...by experts who know local soil conditions

NITROGEN SERVICE*

Your distributor meters Shell NH₃ (Agricultural Ammonia) from cylinders directly into the irrigation water. From his experience with local crops, he knows exactly how much ammonia to apply. Then the nitrogen-rich ammonia, in the proper concentration, is distributed evenly by the water...soaks with the water into the soil where it immediately begins to feed the growing plants.

NITROJECTION SERVICE*

This is a direct soil-injection of Shell NH₃, made with special equipment supplied by your Shell distributor. Again, from his local experience, he knows the proper depth to which the ammonia should be injected, and the exact amount to be applied. As a result, the nitrogen-rich ammonia goes where it will do the crop the most good.



SOLD BY
WALKER BROS.
MERRILL, OREGON

PHONE 4211

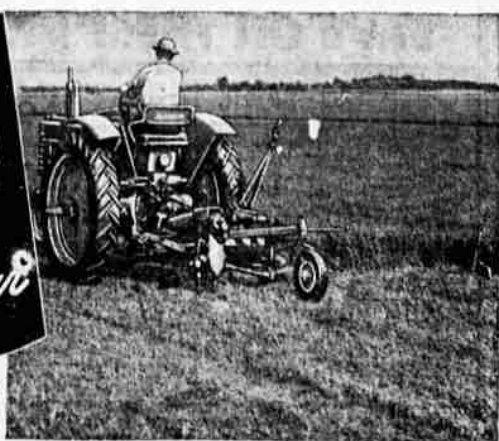
Here's FAST, CLEAN MOWING Year after Year

JOHN DEERE No. 5 MOWER

Everything that counts for fast, clean mowing...for downright dependability is yours in a John Deere No. 5 Mower.

First choice of farmers everywhere, the No. 5 mows 25 to 35 acres a day...cuts clean in any crop. It's a tractor mower through and through...geared for tractor speed and power...simple, durable, and easy to put on and take off. Cutting parts are extra tough to stay sharp

longer, and safeguarded against breakage by a safety spring release that allows the cutter bar to swing back when it hits an obstruction...by a slip clutch to protect parts in case knife is clogged. By means of an easily-adjusted eccentric, the outer end of the cutter bar can be brought ahead to take up lag, thus making it easy to keep knife and pitman in line over the years. See us for details.



The Trademark of Quality Farm Equipment

Crater Lake Machinery Co.

1410 South 6th

Phone 2-2544

THE INSIDE STORY

of easier forage handling

With row-crop attachment, the Allis-Chalmers Forage Harvester quickly turns a field of corn into a silo full of top-quality winter feed.

Stalks are cut by the heavy-duty sickle, then fed from the specially designed hopper straight into the chopping cylinder. Uniform length of cut is maintained and the wide cylinder gives extra capacity.

Curved and spiraled knives—power-sharpened right in the machine—cut cleanly and throw each knifeful into the trailed wagon.

Let us show you the inside story of a lower cost, time-saving harvest of all silage crops.



Attachments are also available for harvesting all standing grasses and legumes, and for windrowed crops.

Tune in
the National
Farm and Home
Hour — Every
Saturday — NBC

ALLIS-CHALMERS
SALES AND SERVICE

WEST-HITCHCOCK CORPORATION
ALLIS-CHALMERS SALES AND SERVICE • FAIRBANKS MORSE — POMONA PUMPS
677 South 7th Phone 7771