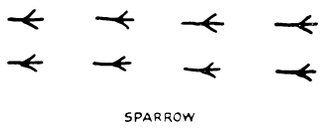
ORNITHOLOGY

NATURE RAMBLINGS



SPARROW

Sleuthing for Birds

➤ BIRDS VISITING your garden in search of food can easily be identified by the tracks they leave. Although such tracks can be found in sand or soil, they are seen most plainly in freshly fallen snow.

You do not have to live in the country to recognize the prints of wild creatures. In almost every garden and yard, however small, you can find the prints of a few birds, if you look for them. Visitors may come and go unknown to you, but they always leave their calling cards in the snow.

The lone print of a woodpecker at a feeding station may be a tell-tale sign that the bird made a brief appearance, but found nothing to eat and so flew off to more productive feeding grounds. The aimless tracks of a robin in the cold north may indicate the bird's dependence upon your generosity if he is to survive the winter.

Bird tracks at first look much alike, but with a little practice you can spot the all-important differences. The shape and size of the print, and the number of toes showing are characteristics which aid us in identifying bird tracks. Whether the tracks are in parallel pairs or staggered is also important.

Small birds hop as a rule; thus their footprints fall in parallel pairs. Larger birds actually walk, leaving prints in a staggered line. A few birds, such as the robin, divide their locomotion almost evenly between hopping and walking.

The sparrow, a hopping bird, leaves paired prints. To identify these from the prints of other hopping birds, note that the side toes are commonly shorter than the middle ones. The size, too, is of some help, being about an inch long.

The toes of a crow are distinctive, the middle toe being definitely nearer to the inner than the outer toe. The crow's track is about three and one-half inches in overall length, with the hind toe print about one inch long. The prints may be paired or alternate, for the crow sometimes hops and sometimes walks. When walking, the toes usually drag.

The robin's toes commonly drag and the three front toes are evenly spaced. The prints may be either paired or alternate, but they are much smaller than those of a crow, being around two and a quarter inches in all. While a starling's tracks closely resemble those of a robin, they are about a quarter of an inch longer.

Science News Letter, January 9, 1954

MEDICINE

Chilling May Save Life of Newborn

➤ NEWBORN BABIES threatened by death from suffocation because of a difficult birth may be saved by chilling them, Dr. James Miller and his wife, Dr. Faith Miller of Emory University, Ga., advised at the meeting of the American Association for the Advancement of Science in Boston.

They based this advice on their studies of the effects of deep chilling combined with unconsciousness in guinea pigs.

When chilled and made unconscious by a drug, the guinea pigs could stand twice the oxygen lack of control guinea pigs.

Since in most hospitals, the newborn baby is partially narcotized, or unconscious, from the pain-relieving drugs given the mother during childbirth, chilling will, the Miller doctors stated, "prove especially effective" in overcoming asphyxia of the newborn.

Science News Letter, January 9, 1954

ASTRONOMY

Suggest Spotting Matter In Intergalactic Space

➤ DETECTION OF matter in the inconceivably vast spaces between the galaxies, the largest building blocks of the universe, by finding a calcium line in the light from galaxies, was suggested by Dr. A. E. Whitford of the University of Wisconsin to the American Astronomical Society meeting.

Thirty years ago, astronomers were divided as to whether or not there was any matter in the spaces between the stars of our own Milky Way galaxy. Since then, however, they have found plenty of evidence not only that such matter is present, but that it may be the source of material for the formation of stars themselves.

Now, astronomers are divided as to whether or not intergalactic space, extending for millions of light-years between neighboring galaxies, is or is not completely devoid of matter. Such matter, Dr. Whitford suggested, might be detected by a calcium line in the light from other galaxies. The calcium line would be caused by the absorption of light of certain wavelengths in the invisible ultraviolet by atoms of ionized calcium.

Just such absorption lines in the light from stars in our own Milky Way galaxy first led to the discovery that there was interstellar matter in space.

However, although thousands of special photographs of other galaxies have been made, chiefly with the 100-inch and 200-inch telescopes, no intergalactic calcium lines have yet been detected. This appears to indicate that any matter in the spaces between galaxies is extremely rarefied.

Another possible method of spotting intergalactic matter, Dr. Whitford suggested, is the radiation of radio energy by intergalactic hydrogen at wavelength 21 centimeters. This perhaps could be observed against the "hot" background of another galaxy, such as the Andromeda nebula, if there were a very rarefied gas in the intervening space.

Science News Letter, January 9, 1954