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# SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Northwest Passage

See Page 168

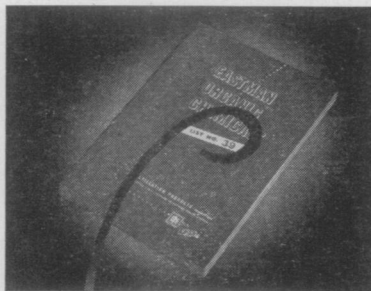
A SCIENCE SERVICE PUBLICATION

## Kodak reports to laboratories on:

where to look for organic chemicals... high speed film for high speed movies...  
two silver salts in the infrared

### List No. 39

This and every year, myriads of companies spawn numberless catalogs, each a jewel in the crown of some sales manager, each a brick in the edifices of the printing industry and the filing cabinet industry. Here we come with yet another and with the presumption to proclaim its advent an event. In support we



cite the reception accorded the 38 predecessors of the vivid turquoise *Eastman Organic Chemicals List No. 39*, which has just been mailed out to those who have told us in past years that they would want it.

We speculate sometimes on why the Eastman Organic catalog is in such high demand by working practitioners of science. Among the more tenable hypotheses, may be listed:

1. It's handy to have around a book weighing less than a pound that gives the *Chem Abstracts* names, laboratory-quantity prices, structural formulas, molecular weights, and melting or boiling ranges (observed, not just quoted) of a representative group of some 3500 organic compounds.

2. It provides a means of distinguishing between the hundreds of thousands of organic compounds known to exist and those actually obtainable by mail or phone order from a single, eminently responsible source (148 items have been added to the latter class in the new edition).

3. It provides routine but useful compilations on matters like pH indicator ranges; transparency regions of spectrophotometric solvents; reagents for a great host of

analytical tests; liquids for refractive index determination; listings of sugars, vitamins, amino acids, alkaloids.

*Now is the time for anyone who needs to know about the availability of organic compounds for the laboratory and who has not yet received List No. 39 to demand it of Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company). Though the catalog is free for the asking and the rate of its distribution has been accelerating at a mad pace for the past 35 years, we are always running into desiring people who want it but don't have it. Can't figure that.*

### High speed boon

In Paris this month at an international symposium on high speed photography, we are announcing 16mm *Cine-Kodak Tri-X Negative Film*. We are making a scholarly and dispassionate exposition of the factors governing choice of emulsion characteristics for high speed motion pictures and in due course of the argument we bring out that the new film has at least twice the speed of the valiant old "Super-XX," with about the same graininess. The happy implication to the man with a *Kodak High Speed Camera* is that he can close down his lens to get more depth of field, or he needn't pour so much light on his subject.

*Cine-Kodak Tri-X Negative Film* is now obtainable from your Kodak dealer, not only spooled for the rigors of high speed cameras (and so labeled) but also for more orthodox 16mm movie cameras used in newsreel, industrial, and sports photography. ASA Exposure Indices for conventional work are 250 for daylight and 200 for tungsten. Actually, this film outstrips the vision of some exposure meter designers by often making possible a quite adequate picture under illumination so low that the photographer can't get any response out of his meter.

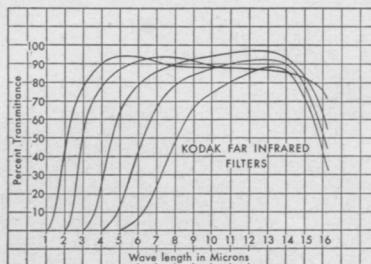
For a technical data sheet on *Tri-X* motion picture film, write Eastman Kodak Company, 343 State Street, Rochester 4, N. Y. We do not process this film.

### Far infrared filters

The rock on which our house is founded is of gloriously photosensitive silver bromide. We now uncover to public gaze a small outcropping of two other silver salts of quite different function—silver chloride and silver sulfide.

Silver chloride in monocrystalline sheet is about as pliable as a fresh stick of chewing gum just out of the wrapper. When optically polished, AgCl becomes one of the most transparent of solids all the way out to  $17\mu$  in the infrared. We know a way to film over such a polished silver chloride plate with a smoke of silver sulfide. The result is a *Kodak Far Infrared Filter*.

Spectral transmittance depends on how the Ag<sub>2</sub>S is applied. It's an empirical matter, involving a combination of spectrally selective scatter and absorbance, but we have nice control over it. We can deliver a filter with any specified specular transmittance, as delineated by this family of curves:



You designate any of nine equally spaced short-wavelength cut-offs from  $1\mu$  to  $5\mu$ , and we undertake to give it to you within a tolerance of  $\pm .2\mu$ .

For a full price schedule on Kodak Far Infrared Filters, write Eastman Kodak Company, Industrial Photographic Division, Rochester 4, N. Y. The lowest price per filter is \$28.50 in lots of 5 for the 1" size with a cut-off between  $1\mu$  and  $3\mu$ . The highest standard price is \$131 for a 5" filter with a cut-off between  $3.5\mu$  and  $5\mu$ . We quote three months' delivery but don't usually take that long. Keep watching for further developments of our excursion into that end of the rainbow where Sir William Herschel had the wit to stick his thermometer in 1800.

Prices quoted are subject to change without notice.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are... serving laboratories everywhere

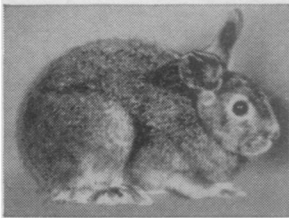
**Kodak**  
TRADE-MARK

# THE NATIONAL AUDUBON SOCIETY

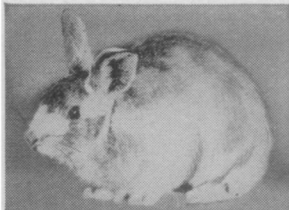
INVITES YOU TO ENJOY

## A New Educational Nature Hobby For The Entire Family!

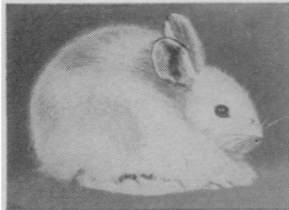
Here is an exciting way to enrich your children's lives—  
and your own—with knowledge of the wonders of nature!



In summer, the snowshoe rabbit is the same color as his tundra home. But when autumn comes . . .



. . . the weather gets colder, and he starts to change color! When the ground is covered with snow . . .



. . . he has become all white—perfectly camouflaged once again!

THIS revolutionary "Museum-at-Home" program, sponsored by the National Audubon Society, has captured the imagination of thousands of families.

The Free Gift described below (Value \$2.00) will introduce you and your family to a thrilling new experience. Now you can discover the wonders of Nature at home, under the guidance of friendly, inspired naturalists.

Each month, with the aid of magnificent color photographs and fact-filled albums in which to mount them, you journey "into the field" on a fascinating quest after Nature's secrets. You see how Nature "protects her own" with camouflage . . . follow the migrations of sea birds across the wide oceans . . . learn the

strange, almost unbelievable ways in which some animals rear their young. *Best of all, your naturalist-guides will show you how to find amazing wonders in your own back yard or park!*

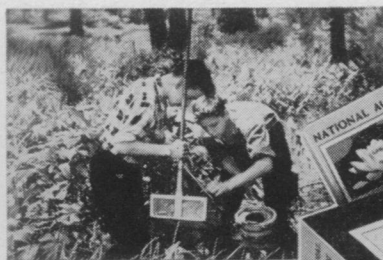
The whole family will look forward to each of these monthly Nature Program sets with the greatest interest. Here is a hobby in which Mother, Dad and the children all participate, and from which all can profit. Few family activities can offer so much at such low cost.

You can "sample" this new program without any obligation. Send the coupon today, for the current set CAMOUFLAGE IN NATURE as a FREE GIFT.



### A Wonderful FAMILY HOBBY

Everything supplied . . . including fascinating pictures in natural color . . . permanent albums to mount them in . . . suggestions and plans for outdoor projects . . . and a handsome case to protect your collection.



In an ordinary woodland pond you can find an amazing variety of fascinating creatures. Your Nature Program tells you what to look for, how to go about it.



**FREE** IF YOU ENROLL NOW  
The Current Album  
**CAMOUFLAGE IN NATURE**

Right now is an excellent time to find out about this new National Audubon Society program. Send the coupon at once for the current set, CAMOUFLAGE IN NATURE, ABSOLUTELY FREE OF CHARGE. Your Free Gift set includes a collection of thirty-one natural color prints, informative album and a distinctive maroon-and-gold color case to protect your collections. The value of this sample Gift Package is \$2.00.

You assume no obligation when you send for this FREE set. You may resign your en-

rollment any time you wish. However, we feel sure that once your family has become acquainted with the "Museum-at-Home" program you will wish to continue these delightful monthly "visits" for a while. The total cost is very low; only \$1 for each set plus a few pennies for shipping.

In any case, we urge you to send for your FREE set and case now, as quantities are limited. Print your name and address on the coupon and mail it today.

**THE NATURE PROGRAM**  
Dept. SNL-9, Garden City, N. Y.

Please send me FREE the CAMOUFLAGE IN NATURE series including 31 natural color prints, and an album to mount them in, plus informative text. I understand that you plan to issue a new Nature series each month, in cooperation with the National Audubon Society, for only \$1.00 each plus a small charge for shipping. You will immediately send me, without any charge, a handsome maroon-and-gold color case for my albums. After examining my FREE set, I'll notify you if I do not wish any others. I may cancel my subscription at any time I wish without further obligation.

Name \_\_\_\_\_ (Please Print)  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**SEND NO MONEY. MAIL COUPON PROMPTLY.**  
(Same offer in Canada; address 105 Bond St., Toronto 2, Ont. Good only in U.S.A. and Canada.)