

Pollen: the breath of life

WASHINGTON — To the 15 million Americans who suffer through the seasonal agonies of hay fever, pollen is unquestionably something to be sneezed at.

But the tiny grains that torment one out of 14 citizens, who in 1975 spent \$2 million on hospital care, \$224 million in doctors' bills, and \$297 million on drugs, are a blessing, not a bane, to most people.

"Pollen is to plants what sperm is to animals: the agent of viability," writes Cathy Newman in the October National Geographic. "It is the breath of life as well as of sneezes."

Allergic or not, there's almost no way for you to escape it. Various hay-fever cures are being studied but none has yet been found.

NO PLACE TO HIDE

And hiding places have all but disappeared. Even Arizona, once a haven for the afflicted, has lost that advantage, largely because of the introduction of non-native plants that have sent the pollen count soaring about tenfold in two

decades.

"If you don't mind penguins, you can always go to Antarctica," suggests Dr. Max Samter, senior allergy and immunology consultant at Grant Hospital in Chicago.

Newman's reporting on pollen took her far beyond the wheezes and sneezes of hay-fever sufferers: to a murder in Vienna, to a Navajo medicine man's hogan in Arizona, to a Paris laboratory, to a Texas oil field, to an athletic field in Finland.

In Vienna, the only clue in a 1959 murder was a pair of leather boots belonging to the suspect. Less than a gram of dirt clung to the carefully cleaned boots. A pollen expert—called a palynologist—found 1,200 grains of pollen in the dirt.

The pollen pinpointed the location of the murder and contradicted the suspect's story. Confronted with the evidence, he confessed and led officers to the buried body.

In the Navajo hogan, Fred Stevens Jr., a medicine man in Chinle, Ariz., told Newman: "Corn pollen is a true thing. It is our life. When a child is born, we feed it pollen, and it is in his spirit the rest of his life. At weddings it blesses the young couple. And when a man is dying, pollen is put on him too."

Pueblo and Apache Indian tribes of the Southwest use the sacred substance in various ceremonies, from puberty rites to special dances to healing rituals. The Navajo owner of a new pickup truck, Newman was told, even sprinkled pollen on the tires to bless it.

GRIEVING CAVEMEN

In Paris, palynologists examined grains of pollen, which survives the ages, from a 50,000-year-old grave site of a Neanderthal man in Shanidar Cave, Iraq. The scientists concluded that neither

THERE ARE "10" DIFFERENCES BETWEEN THE TWO PICTURES. CAN YOU FIND THEM?





I) SECOND BOYS KITE 2.) SPOTS ON DOG 3.) TRIM ON SECOND GIRLS SWEATER OF CLOUD.

9.) PANT CUFF ON FIRST GIRL. B.) PATTERN ON GIRLS SCARF.

9.) WAISTBAND ON BOY'S COAT. 10.) SHAPE OF CLOUD.

animals nor wind could have carried the pollen so far back in the cave, but that mourners had left

flowers.

"The tiniest of clues had revealed a new dimension of cavedwelling Neanderthal man,"

Newman writes. "He grieved."
In the Texas oilfields, the in-

dustry uses palynology to help determine where and how deep to drill. Fossil pollens serve as a geological dipstick for prospective exploration.

"It's detective work on the grandest scale," says Lew Stover, a senior research associate in Exxon's Houston offices. "People regard oil exploration as static. It's not. Think of mountains uplifting, seas drying up, plants evolving. What could be more grand?"

On the Finnish track, Seppo Nuuttila extols the value of pollen supplements for the Olympic

(Turn to Page B13)



1. PINK 6. ORANGE
2. RED 7. PEACH
3. YELLOW 8. LT.BROWN
4. BLUE 9. LT.BLUE
5. BROWN 10. LT.GREEN

BALLET: THERE ARE MANY DIFFERENT WAYS OF TELL-ING A STORY. IT CAN BE TOLD IN WORDS PICTURES, MUSIC, AND CAN BE ACTED OUT. ANOTHER WAY TO TELL A STORY IS BY DANCING THIS IS CALLED A BALLET. THE STORY IS TOLD BY THE MOVEMENT OF THE ACTORS. THERE IS NO SINGING OR SPEAKING. SOMETIMES BALLET IS CALLED TOE DANCING WHICH CREATES LIGHTNESS.

