Animal Aides Offer Handicapped A Measure Of Independence

BY BORIS WEINTRAUB National Geographic **News Service**

NEW YORK - "Henry, light," Sue Strong says.

Instantly, Henry, Sue Strong's "partner, associate, companion who shares my apartment," leaps up and flicks on a light switch. Sue Strong is delighted.

'Good girl,'' she tells Henry short for Henrietta — and allows her a swig of orange juice.

"Henry, tape," she says a few moments later. Again, Henry leaps up, plucks a cassette from a rack, takes it to a cassette player and inserts it in the proper manner. Again, Miss Strong praises her and gives her some juice.

To most people, these are simple tasks, hardly cause for notice, much less for praise or rewards. But to Sue Strong, who lives in a 12th-floor Manhattan apartment, Henry is the difference between a measure of independence and total reliance on others.

Tiny Capuchin Monkey

Sue Strong is a quadriplegic, and Henry is a tiny, curious, active, and exceedingly well-trained capuchin monkey.

Henry is one of eight such monkeys who have been placed as aides to quadriplegics in the eight years since Dr. M.J. Willard, then postdoctoral student in behavioral psychology at Tufts-New England Medical Center in Boston, began experimenting with the idea of training monkeys to do useful tasks for people who have lost the use of their arms and legs.

It is not the only attempt to train animals to aid disabled human beings. Guide dogs for the blind have been in use since the early 19th century, but in recent years there have been a number of experiments to use dogs for something besides pets.

Many have moved from the experimental to the operational stage. For example, "hearing dogs" are placed with hearingimpaired people to alert them to everything from a knock at the door to a fire alarm.

One of the biggest programs is Canine Companions for Independence in Santa Rosa, Calif., which trains dogs to serve as aides for the physically disabled, the deaf, and the elderly. Its founder, Bonita Bergin, was working as a special education teacher 11 years ago when she was struck by the possibilities of training dogs to push switches, open refrigerators and fetch prepared sandwiches, push elevator buttons, pull wheelchairs, and perform a variety of other chores.

Poodles, Collies, Retrievers

"The dogs are taught 89 commands, and they can be combined to make more," says Janet Herring-Sherman, marketing director of the nonprofit organization. "Now we have our own breeding stock of German shepherds, golden retrievers, Labrador retrievers, poodles, and border collies, depending on the kind of work they are trained to do, and we place about 60 dogs a year, mostly in northern California.'

So far as she knows, however, Dr. Willard, now affiliated with the Albert Einstein College of Medicine in the Bronx, is the first two train monkeys to help the disabled.

"I've met two people who had thought of the idea," she says, "but the technology to make the whole thing practical has only been around fairly recently.'

That technology includes electric wheelchairs and chinoperated lasers, by means of which quadriplegics can tell their monkeys just which cassette.



Henry — Short for Henrietta — sets a plastic container of juice in a holder for Sue Strong, a quadriplegic for whom the capuchin monkey functions as an additional set of arms and legs. On command, Henry will place a straw in the bottle so that Miss Strong can drink from it while reading the magazine Henry has fetched and placed in a rack. Henry's reward for successfully performing a task is a sip of juice from a bottle of her

magazine, or book they want. But it also includes tiny backpacks that contain an electrical device operated by remote control. When a monkey misbehaves, the quadriplegic can activate the device to sound an unpleasant tone and deliver a mild shock.

"We don't motivate by punishment, because all the helping behavior is foodmotivated," Dr. Willard emphasizes. "But we teach them that if they go up on that stereo or hang around the medicine cabinet, they're going to get that tone and that shock. It works; it's like

magic."

The problem, Dr. Willard says, is that, while it's not hard to train monkeys to do a given task, it's another matter to keep them from being actively destructive the rest of the time. Or, as Sue Strong says:

'You couldn't live in Versailles Palace and have a monkey. There's a certain degree of minor destruction with a monkey involved, just because they have hands. Henry's written on the wall a few times, broken a glass, things like that.'

Qualified

The ability to tolerate such destruction is just one of a number of factors that determine whether quadriplegics are suitable for life with monkey aides. The candidates must be in reasonably stable health, cannot have small children, have to be willing to give their human attendants a break for a few hours without fear that something might go wrong. Dr. Willard estimates that only 5 to 10 percent of the nation's 90,000 quardriplegics qualify.

'I've concluded that it would be a mistake to approach someone (Turn to Page B12)

Not Everyone



PEACH GREEN LT.BROWN LT. BLUE 5. BROWN 10. LT. GREEN

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