

## PLANTS

*Solicitous care for living things affords satisfaction to one of the most lively instincts of the child's mind. Nothing is better calculated than this to awaken an attitude of foresight.*

—Maria Montessori

An atmosphere of love and respect for plants and animals in the home

and classroom is the best foundation for a lifetime of comfort and interest in nature. This begins in the home as the child absorbs the family's attitude toward vegetables, flowers, gardens, houseplants, weeds, and trees.

Lessons that make a deep impression come from first hand experiences of plants; nothing can substitute for seeing, and smelling flowers in the home, and watching the daily growth of a flower or vegetable in the garden.

## NATURE TABLE OR NATURE SHELF

A little table or shelf, in the home or classroom, dedicated to a changing array of beautiful objects from nature, is a delight to children. Some suggestions are a vase of flowers, leaves, a colored leaf in the fall, or a plant experiment (from the biology curriculum for the 3-6 class).

It is also the place where the botany experiments, to teach that a plant needs warmth, light, and water, can be carried out. In traditional classes an experiment

## BIOLOGY CURRICULUM FOR

**THE 3-6 CHILD:** See page 84

for more information

**GB71 \$5.00**

## BRASS PLANT MISTER

This brass mister is of better quality than those usually available today. It is a favorite activity of children to "give a drink" to houseplants, at home and in school. Adult indoor gardeners know that it is as important to water the leaves as the soil. A child can also learn to pick off dead leaves and loosen the soil of a potted plant. This beautiful plant mister is also used to teach a child to polish brass. It is 6" tall.

**DP600**

**\$20.50**

## COTTON DOILIES A SET OF SIX

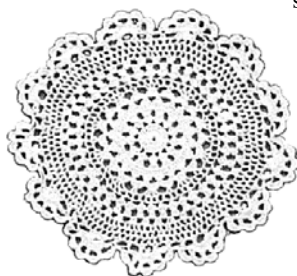
Flower arranging—in small vases placed on a special doily or coaster—is a wonderful way for a child to beautify the environment, at home or in school and to give the child experience in cutting, pouring, carrying and placing breakable vases, and caring for nature.

If no flowers are easily available, provide a selection of wild plants, ferns, evergreen cuttings, or dried leaves in the winter. What a nice way to begin the day —by making the environment beautiful.

When looking for vases, get the smallest and sturdiest you can find, childsize yet real.

**DP820**

**\$3.70**



## 3-PART CARDS, FLOWERS

This set is designed to help children recognize and to name 20 common flowers, many of which are commercially available throughout the year. This duplicate set of picture cards can be used in simple matching exercises, or in 3-part matching activities if one set is cut apart. The 40 photocards (3 1/4" x 4") are in full-color and laminated. Flower background information is included for the adult.

**DP160**

**\$24.00**



## WILDFLOWERS FANDEX

*Trillium Grandiflorum* is the scientific name of what we in the Northwoods of California call *Trillium* and look for every spring. It is important to use the scientific names with children because there are several common names for many flowers. In this case: *White Trillium*, *Great Trillium*, *White Wake Robin*, and *Bath Flower*. Some of the most interesting flowers, corollas, pistils, colors can be found in tiny or grand specimens in nature. Learning this helps open a child's eyes to the wonders of nature all around her.

47 common North American wildflowers are illustrated and described. The colorful die-cut photograph of the flower at the top of each card makes it easy for even young children to identify a specimen. Also included is a picture of the whole plant, plus information on the life cycle, natural range/habitat, flowering time, flower colors, and height. Each card is 10.5" long.

For a 3-6 class use two sets, cutting off the flower part of each fandex flash card to make three-part reading cards. For reference laminate a third set and cut in such a way that the child can actually trace the flower with her fingers, and read the valuable information on the back. This is also useful for the 6-12 class where the study of flowers continues in a new way.

(\*) **DP190**

**\$9.95**

like growing a seed might be done as a group, with one paper cup and seed for each child. But this kind of experiment always makes some of the children feel bad as their seed doesn't sprout, or introduces competition as one plant is taller than another. In a Montessori class there is just one seed in a cup, or experiment, for all children to share.

It is important to keep this area very clean, beautiful, and constantly changing. A little tray with a magnifying glass

could be kept on the nature table for closer observation.

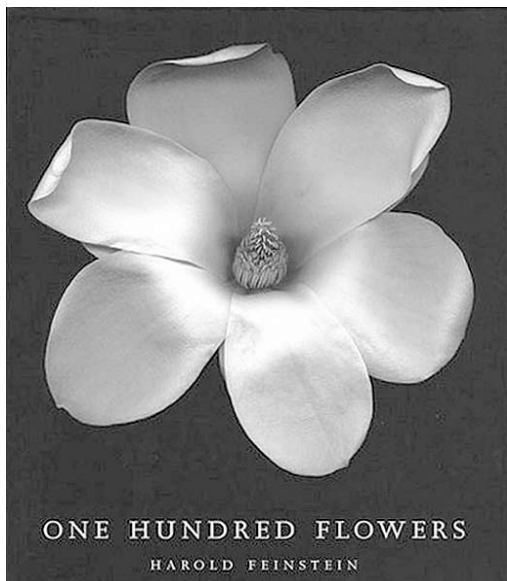
In the 3-6 classroom a plastic mat, bucket and sponge; and a small drying towel are kept on a tray under or near the nature table. One of the favorite activities is to carefully clean the table and the items on the table.

Lay out a plastic mat and carefully remove everything from the shelf. If there are dry leaves or soil, show the child how to wipe them off the edge of

the table and into his hand.

Next show him how to dip and wring out the sponge, and to wipe the top of the table and the legs. With a drying cloth dry everything. Wipe and dry the plastic mat, then clean the sponge, hang the drying cloth up to dry and replace it with a fresh one. And replace the items on the table, letting the child decide on their arrangement.

Now the child knows how to carry out this activity at any time,



### ONE HUNDRED FLOWERS

This amazing book from Italy is a large and beautiful art book, a coffee-table book, a book that will intrigue the whole family, opening eyes to the wonders of flowers.

Each page shows just one flower, just like on the cover, with a black background and no distracting words. One can see the veins in the corolla, the variety of pistil and stamen, all the elements the child is studying and learning to appreciate, recognize, name, at this age. On separate pages there is a list of the flowers, their scientific names, and an interesting fact, such as: The common name of the dandelion comes from the French term *dents de lion*, a phrase that plays on the similarity between the jagged edges of the dandelion leaf and the teeth of a lion. Hardcover, 11" x 13", full color, 141 pages.

DP444

\$50.00



### TREES FANDEX

A wonderful leaf-study resource. There are 50 North American Trees identified by leaf, bark, and seed. For a 3-6 class use two sets, cutting off the leaf part of each of 50 "flash cards" to make three part reading cards.

For reference laminate a third set and cut in such a way that the child can actually trace the leaf margins with her fingers, and read the valuable information on the back. This is also useful for the 6-12 class where the study of leaves continues. 10.5" long, full color.

DP215

\$9.95



### LEAF & FLOWER PRESS

This press can be used for pressing flowers, grasses, ferns, leaves and small plants for making vocabulary cards with real specimens, or art projects.

The press is 7" square, made of fine birch plywood with a charming silkscreened floral pattern on the front. It comes with 10 sheets of blotter paper, 6 corrugated inserts (holding up to 5 layers of specimens at one time) and an instructional pamphlet. Assembling the press by means of the wing nut and bolt fasteners is especially good work for a young child.

DP07

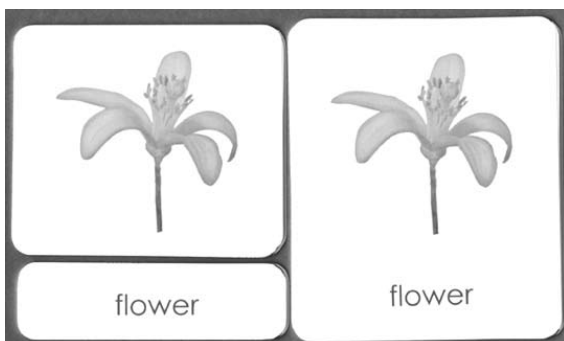
\$21.00

### 3-PART CARDS, PARTS OF THE FLOWER

Soon after the child explores the flower by color and texture, and learns the names of many flowers, she will want to know the names of the parts. These cards isolate each named part in color: flower, petal, stamen, pistil, sepal, corolla, calyx, stem and perianth. 27 cards, 9 with names, 9 without names, 9 labels. They are laminated, 3.6" x 4.3".

DP850

\$18.95



independently of an adult's permission. This gives the child the feeling of really caring for the beautiful objects and not just looking at them.

### PLANTS

It is important for a child to spend some time in the outdoors experiencing nature every day if possible—in all kinds of weather and during all seasons. Going for a walk with a young child, if one follows the child's slow speed and

unpredictable interests, can open our eyes to the world of nature like never before. Since this is the age that children want to know the names of everything (not the "why" and "how" as much as the names) we teach the names of plant, parts of the plant, kinds of roots and stems, parts of the root and stem, attachment of the leaf to the stem (such as *alternate* or *opposite*), any of the botanical concepts that will be learned later, as long as they are visible in the child's world, will work.

### FLOWERS

This is NOT the time to dissect flowers (or plants) with children! A child at this age identifies with the plant and animals in her world and can be very upset, even without our seeing it, at the destruction of a flower. Instead teach the names of flowers, the parts of a flower, the types of corollas, etc.

Flower arranging is an important part of the ritual of beginning the day in many classrooms and can be done in the home.



### TALLEST TREE STACKING BLOCKS

I am having such fun describing this particular item, as I see redwood trees looking out my office window, and hear screeching Steller's jays attacking the birdfeeder out of the living room window! This set of 10 stacking blocks captures the feelings of the plants and animals, and the height of the trees. It is 35" tall. Each block contains (1) a section of the redwood tree, (2) a number with the same number of items, such as *10 redwood cones*, *9 Steller's jays*, *8 red-legged frogs*, (3) a scene of a section of the tree with the creatures that live in, on, and under it—mushrooms, banana slugs, the raccoons, hummingbirds, owls, and woodpeckers, and others, and (4) a redwood-related poem, such as:

*Banana slug and ladybug  
greet as they pass by.  
Mushrooms tops, the lady stops,  
then zips into the sky.*

This unique toy was created by the Parks Association of Northern California. The blocks are made of sturdy cardboard covered with brightly colored wipe-clean paper, ranging from 5.5" to 1.5".

DP422 \$19.95

### WHY DO LEAVES CHANGE COLOR?

For both adults and children, this is the most common question. Just how do leaves change color in the fall? This phenomenon is explained, and places to see beautiful fall colors are suggested.

This is also a very good early reader. Softcover, 10" x 8", color, 32 pages.

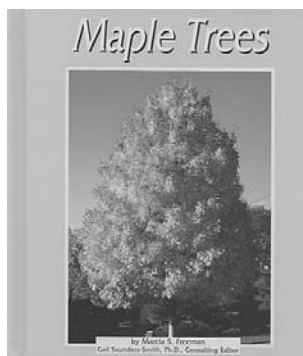
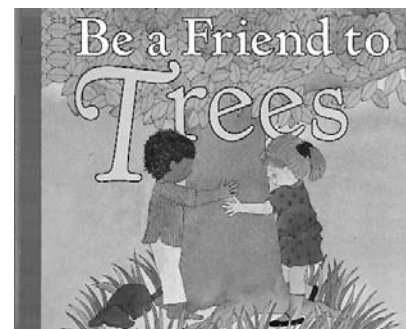
DP136 \$6.00



### BE A FRIEND TO TREES

An awareness of trees and their relationship to the ecosystem of the whole earth, can be gently introduced at this age. Parents sometimes mistakenly think that because a child is surrounded by trees in the country, or in parks in the city, that she is automatically aware of their beauty and importance. Children are shown in a way that is geared to their interests, the value of trees for small animals, for making furniture, and for creating healthful air. Softcover, 10" x 8", color, 32 pages.

DP137 \$6.00



### TREE READERS

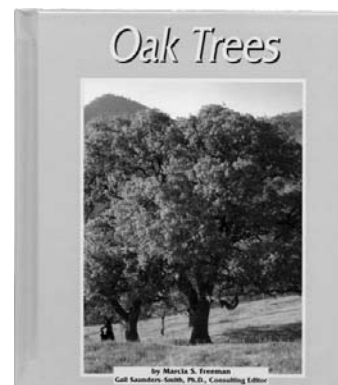
Each of these early readers tells the story of one kind of tree. Each 2-page spread has a color photograph described by simple yet interesting, scientifically correct text of just a few sentences. At the end of the book is a simple glossary and a simple index, to teach the child to use these tools, and suggested reading. The books are hardcover, sturdy sewn library binding, full color, 6.2" x 7.2", 24 pages.

DP540 *Maple Trees* \$13.95

DP542 *Oak Trees* \$13.95

DP544 *Pine Trees* \$13.95

DP548 *Trees Set/3* \$41.00





A selection of interesting tiny vases of different sizes and shapes, from different countries, is important.

Just as with the cleaning of the nature table, a tray can be prepared with all of the items necessary for flower arranging: small vases, scissors to cut the flowers, a small pitcher to fill the vases and perhaps a funnel if the tops of the vases are small, and a sponge and drying cloth for cleaning up. Also a selection of handmade cotton doilies makes this ritual

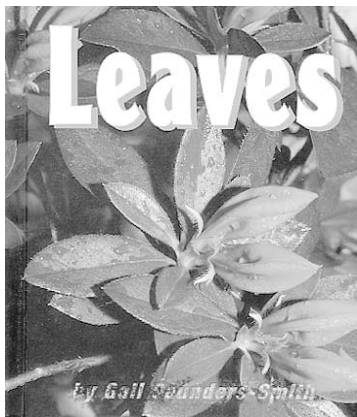
very special.

Having these flower arrangements on the kitchen, living room, or classroom tables, even if they consist of only one small flower or fern in a vase, brings the child's attention to the beauty and variety of nature as he goes through the day. Don't be surprised if all the flowers and vases end up on the same table the first time.

Grass, leaves, wildflowers, or cultivated flowers all make ideal art



Fruit cards in a Montessori classroom in Thailand.



#### FIRST BOTANY BOOKS

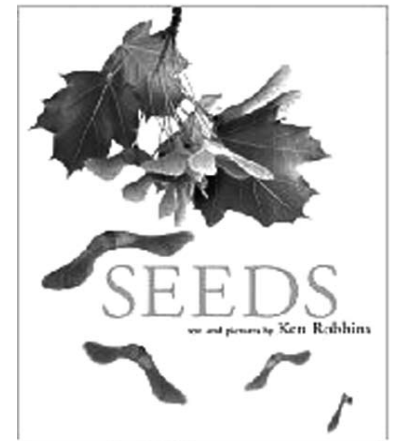
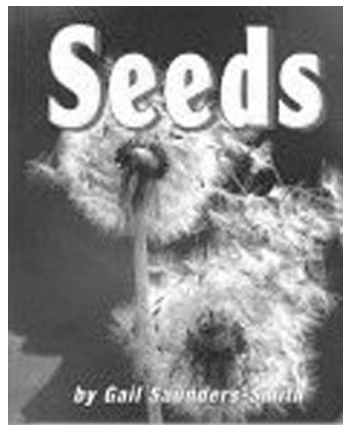
These library-bound hardcover books form the basis of the botany library for the young child—*seed*, *stem* (*root* is in the *stem* book), *leaves*, and *flowers*. The informative text that accompanies the clear colored pictures is presented in a "first reading" format. Each book begins with a "Table of Contents," and ends with a glossary, book recommendations, and usable first index. They will be used by a wide age range of beginning readers. Hardcover, 6" x 7", color, 24 pages.

DP250 <i>Seeds</i>	\$13.95
DP251 <i>Stems</i>	\$13.95
DP252 <i>Leaves</i>	\$13.95
DP253 <i>Flowers</i>	\$13.95
DP259 First Botany Books, Set/4	\$55.50

#### THE CARROT SEED

Since 1947 this charming book has been a favorite of children. With very few words and pictures the author shows and tells the simple story of a little boy waiting for the carrot which he has planted to come up. It is available in both hard and softcover, color, 6" x 8", 24 pages.

DP777 <i>Carrot</i> , Softcover	\$7.00
DP778 <i>Carrot</i> , Hardcover	\$16.99



#### SEEDS

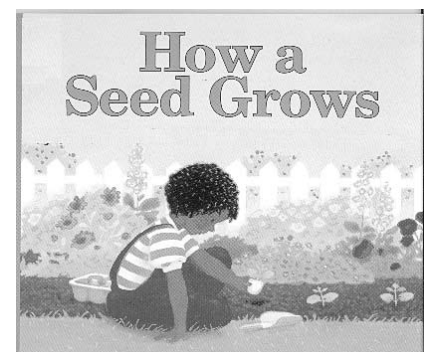
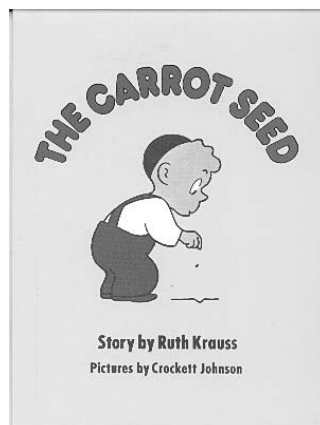
In this beautiful book young readers will learn how seed grow, and how they vary in shape size, and dispersal patterns. From cherry pits to exploding pods, to sticktight seeds that cling to the shoes the crisp, large-scale photographs, and interesting text illuminate how wondrous nature springs up throughout the year before our very eyes, and inspire children to participate: taking walks to find sticktight seeds stuck to socks, blowing dandelion seeds, flying maple leaf helicopters and growing an avocado plant. Hardcover, color, 8" x 10", 32 pages.

(\*) DP060 \$16.99

#### HOW A SEED GROWS

This lovely picture book shares the secrets of seeds with the young child, and gives simple instructions for planting beans in an eggshell—12 beans, to see what conditions help them grow the best. It will open our eyes to the seeds in our foods and all around us. Softcover, color, 7" x 8.5", 32 pages.

DP200 \$6.00



materials when they have been preserved in a flower press. In our home we have often kept previously dried leaves and flowers in a container next to the flower press ready for decorating birthday cards, or for including in letters.

If you are planning an outdoor environment for children at home or at school, be sure to include a space for wild specimens. Some of the best biological examples of leaf shapes, examples of the *opposite* or *alternate* attachments of

the leaf to the stem, and so forth, can be found on wild plants such as dandelions and thistles.

First we point out, invite to touch, and give the vocabulary for experiences and concepts such as *orange, red, small, long, rough, smooth, bumpy, hard, and soft*. This is a classification that even the beginning botanist can use.

Very soon we can give more. The young child wants to know exact names of everything. Not just "flower" but

"California poppy," and later, after exposure has stimulated an interest in plants, we can introduce the botanical names and further classification—such as kinds of leaf margins or flower corollas. Exposure to plants and animals initiates many important discussions that a wide vocabulary can enrich and make more satisfying.

Providing garden tools and a small wheelbarrow for the child, so that she can help to carry grass cuttings or anything

### SEED & ROOT VIEWER

This viewer will make the magical world of seed sprouting, and root growth available to the eye.

Plant 2 large beans in each tube, protect from the light with black paper and the growth will occur right next to the outside of the tube. If the tubes are kept in a dark place while the seeds and roots are sprouting the growth will be all the more impressive.

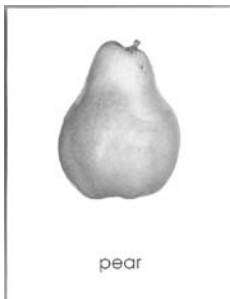
Three 5.5" long plastic tubes come in a wooden holder. For the first planting, soil and seeds and directions are included.

DP870

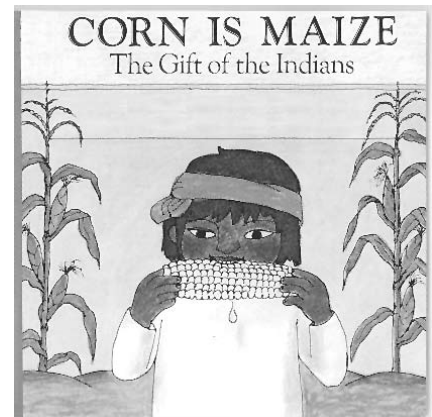
\$11.00



carrot



pear



### CORN IS MAIZE GIFT OF THE INDIANS

Not only is this a story of a favorite food of children, and a seed easy to grow, but it introduces the idea of plants moving from country to country, a study in the 6-12 class. The history of corn couldn't be better presented for children than in this picture book by Aliko. It is scientifically and historically correct and still reads like an interesting story. Softcover, color, 8" x 8.5", 34 pages.

DP050

\$6.00

### MICHAEL OLAF FRUITS & VEGETABLES VOCABULARY CARDS

For years we have looked for the perfect fruits and vegetable cards because these food groups are so important for young children, and a most important collection of vocabulary words. Sets have gone in and out of print over the years, but none have ever been up to our high standards.

Finally Susan devoted a large portion of her oil painting time to creating a collection of 24 vegetable paintings in our studio here on the Northcoast of California. The following year we developed the set of fruit cards made from color photographs touched up to look a bit like original paintings.

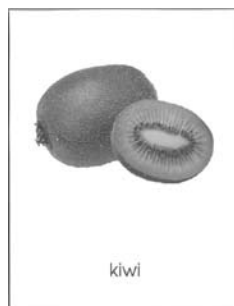
The cards are professionally printed in full color on stiff cardboard, size 4.25" x 5.5". There are 24 different images, one of each, in each set. Please order two identical sets if you plan to make 3-part reading cards.

DL055 Vegetable Cards

\$12.00

DL250 Fruit Cards

\$12.00



kiwi



mushroom



vocabulary words for the child, herbs and spices from all over the world, with names in English and Latin and interesting information on the origin, meaning, and use. Each set has 54 different full color pictures, for the home or the classroom.

DP520 Herbs Cards

\$5.50

DP522 Spices Cards

\$5.50

### HERBS & SPICES CARDS

Herbs and spices are used in class in the form of "smelling bottles". Children learn to match bottles of identical smells. This awakens an interest in growing herbs and spices and learning the names of them. Here are two sets of traditional playing cards with a fantastic set of important





else which needs to be transported, is an excellent way to involve the child with the yard work.

Although the adult will often shy away from hard work, the young child will welcome important real work. This is the time to introduce gardening to children. Even one pot, inside or outside, with one plant, is better than nothing when there is no room for a large outside garden.

It is important to show the child the

end, as well as the beginning, of any of these activities. Sometimes endings can be separate activities so the child will be ready for them at the conclusion of a hard days work in the garden. For example, show the child exactly how to hold the shovel in order to carefully hang it up or place it where it belongs.

Wherever the adult is sensitive to the child's natural need for order, there is a place for every tool. Children are shown how to clean and put away the tools, how

to hold the wooden handles and polish the metal. These activities give a great feeling of satisfaction, independence, and completion of a job well done.

Beautiful pictures of plants and flowers (photos, postcards, reproductions of great oil paintings) can be hung on the child's wall. You may be surprised at a child's preference for nonfiction books about nature when she has been kept in touch with nature.

### GARDEN TOTE & TOOLS

This child-size garden tote bag provides a place to keep the three tools that come with it, and a place to store seed packets, string, gloves, all of the other things necessary for gardening.

The bag is made of sturdy white canvas with green canvas trim. There are 7 pockets including the three that hold the trowel, shovel and 3-pronged rake. For an idea of the size, the longest tool, the pointed trowel, is 8.5" long. The tools are made of painted metal with wooden handles. The set of three tools can be ordered without the tote bag. *NOTE: See work gloves on page 4.*



**DP630 Tote Bag and Garden Tools, Set/3** \$15.00  
**DP580 Garden Tools, Set/3** \$8.00

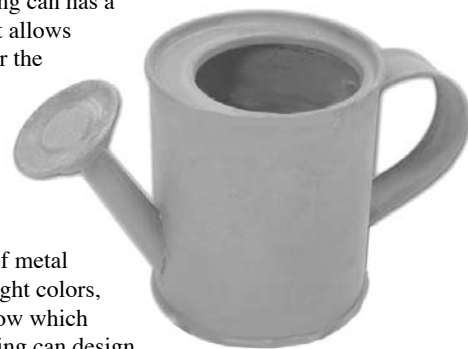
### GARDEN WATERING CAN

This watering can has a spray nozzle that allows the child to water the plants without disturbing the soil, a problem even for adult gardeners.

It is made of metal and comes in bright colors, but we never know which color. The watering can design is sometimes a bit different than this illustration as the makers discover better and better designs. The can body is 5.2" high and 4" in diameter.

**DP755**

**\$9.00**



### GARDEN READERS

These are the first botany readers, just a few words, one phrase per page, telling something about one of the plants commonly grown in a children's garden: beans, carrots, and sunflowers. Each 2-page spread has a color photograph described by simple, interesting, scientifically correct text. At the end of the book there are a glossary and a simple index; both are perfect for the child's first introduction to the use of these tools. The books are hardcover, sturdily sewn library binding, full color, 6.2" x 7.2", 24 pages.

**DP480 Beans** \$13.95  
**DP481 Carrots** \$13.95  
**DP482 Sunflowers** \$13.95  
**DP485 Garden Readers, Set/3** \$41.00

