

CROSSSECTION

Winter



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Special points of interest:

- Where the wild things are
- Grant opportunity for school habitats
- Caring for injured trees
- Adding trees and shrubs to your yard
- Spring tree sale offerings

2005 Tree Seeding Sale Information is on pages 3 and 4 of this issue!



WILDLIFE IN WINTER

Have you ever stopped to wonder what some animals do in winter? We all learned in school that bears hibernate and birds fly south. But what about turtles, frogs, worms or insects? Here we take a look at what the wildlife is up to.

Under the water surface. You might be surprised to see all the activity going on under the ice of a frozen pond. Fish remain active throughout the winter, as long as there is enough oxygen in the water. They will slow down as the water temperature drops, but continue to feed. Many frog and turtle species will actually burrow down into the mud at the bottom of a pond. They may also hide under logs or vegetation underwater. Their metabolism drops, and they absorb the oxygen they need through their skin. If you were to look underwater in winter, you might also find some tadpoles. Many of the true frogs (bullfrogs and green frogs, for example) spend one winter as tadpoles. In the mammal world, the trick is planning ahead. Towards the end of summer, beavers start chopping down small trees. They drag them into the water and jam one end into the mud. Once the water freezes over, this becomes their food source. They breathe air in their lodges until the ice breaks up again.

Digging deep. Many smaller land animals and soil organisms dig in for protection. Earthworms will travel more than six feet down to escape frost in the winter. Salamanders sometimes dig their own burrow or take advantage of another animal's abandoned hole. Other animals don't go quite so deep, but will instead rely on snowfall as insulation. Since 80% of snow is air, it is excellent at holding in heat. Small rodents will develop runways under the snow, and you will only notice these in the spring, as long, matted down lines in your lawn.

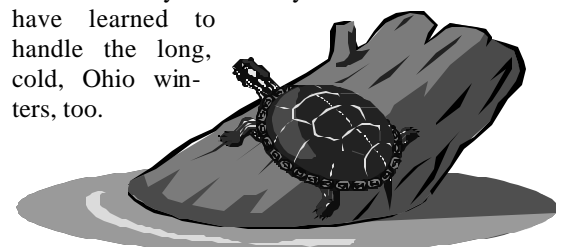
Taking advantage of their life cycle. Some animals take advantage of well-protected stages of their life cycle. Many insect adults do not survive the winter. They cannot adapt to the cold weather and lack of food sources. But before they die, they make sure that the

next generation will begin. Eggs lay dormant in the soil or attached to plants. Warmer spring temperatures trigger the eggs to develop and hatch out as larva. Some butterflies, moths, and hive insects are the exception. They can migrate or swarm to survive the winter as adults. Other species overwinter as pupae.

Toughing it out. Many animals stick around all winter and remain active. Great horned owls and barred owls actually mate and lay eggs in January and February. These early chicks will have all summer to learn to hunt, and fledge long before hawk and eagle chicks are. The best time to listen for these large owls is on cold winter evenings. Deer continually browse all winter, keeping warm by burning lots of calories. Snowshoe hares change color to blend in with the snow. Their feet also become enlarged in order to spread out their weight on the snow surface. ODNR Division of Wildlife just released 40 additional snowshoe hares in Ashtabula County, hoping to rebuild the local population of these native animals.

With a little help from their friends. Some species have actually changed their habits as a result of human interaction. Canada geese are less likely to migrate when there is abundant unharvested grain, ponds kept open by fountains, and people offering food. Bald eagles will congregate at warm water outlets from power plants, to catch the abundant fish attracted by the warmer water. Many songbirds rely on outdoor feeders for the winter, making it very important to keep a feeder maintained for the entire winter, if you offer one into the fall.

Next time you bundle up and head outdoors, watch and listen for signs of wildlife around you. They have learned to handle the long, cold, Ohio winters, too.



GRANTS TO DEVELOP “WILD SCHOOL SITES” AVAILABLE THROUGH ODNR

COLUMBUS, OH -- Ohio teachers who have successfully used Project WILD in their classrooms can now provide students additional hands-on learning about wildlife and habitat through grants available from the Ohio Department of Natural Resources (ODNR) Division of Wildlife.

Ten grants of \$500 each will go to schools currently participating in Project WILD, a supplemental environmental education curriculum for grades K12. Project WILD uses wildlife and wildlife management techniques to teach traditional school subjects such as math, science and language arts. Teachers can use the new grant money for materials, equipment and activities to develop “Wild School Sites” on their campuses.

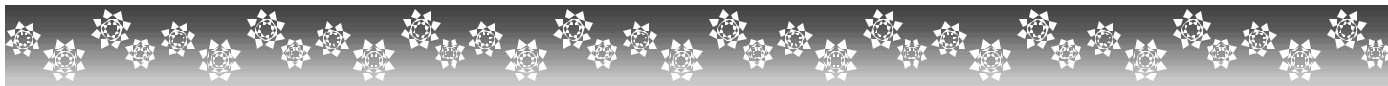
“A ‘Wild School Site’ project allows teachers to take lesson plans outdoors, helping bring environmental education concepts to life in a real way for students,” said Jen Dennison, wildlife education coordinator for the ODNR Division of Wildlife. “An added benefit is improvement of the schoolyard habitat for wildlife and people.”

The grants are competitive in nature and will be awarded to applicants that best meet the Wild School Site criteria. That criteria includes feasibility of the project, benefit to students in understanding the needs of wildlife in Ohio, and participation of students, teachers, staff and the community at large in the development and upkeep of the site.

Funding for the “Wild School Site” grant program comes from state income tax check-off donations to the Wildlife Diversity Fund and fees generated from the sale of cardinal license plates.

Interested Project WILD educators should submit an application before May 31 to the ODNR Division of Wildlife, 2045 Morse Road, Bldg. G, Columbus, Ohio 43229-6693. Details of the program and an application can be found on the Division of Wildlife’s web page at ohiodnr.com.

To become a Project WILD-certified teacher, educators must attend a workshop to obtain the curriculum. Information about available workshops is available online. For more information, contact Jen Dennison, state Project WILD coordinator at 1-800-WILDLIFE.



HOW TO CARE FOR TREE WOUNDS

With the high winds, heavy snows, and coating ice storms we have had this winter, many trees have been damaged. Before abandoning hope, take the time to assess the damage and see what can be repaired.

Bark is a tree’s first line of defense against insects, bacteria and fungi. Any time the bark is removed and fresh wood is exposed, it creates an entry point for decay. If left unchecked, the decay will weaken the tree to the point where it fails. Bark is also what the tree uses to heal wounds. It grows to cover the exposed wood, usually leaving a mark known as a callus. Bark damage is caused by equipment striking a tree’s trunk. It is most commonly seen in the summer, as a result of lawn mowers or string trimmers, but can also be caused in the winter by snow blowers, wayward sleds, or snowmobiles. Since the bark is the protective skin of the tree, and also the tissue that transports nutrients, it is important to promote quick healing of the wound. When assessing a bark wound, consider how far around the tree the injury goes. If a bark injury involves the full circumference of the tree, then the tree has been girdled and will die, because sap cannot move between the roots and the branches. To promote quick healing of a bark wound, and reduce the chance of insect invasion remove loose bark and trim any roughly torn edges, while keeping the opening as small as possible. It is no longer recommended to create an elliptical shape to a ragged injury.

Broken limbs and branches present several issues to deal with. First, they reduce the number of leaves the tree will have next year. A good rule of thumb is that if a third or more of the foliage is removed in a year, a tree will likely not recover. Second, the broken limbs might leave the tree looking lop-sided for many years to come. Aesthetics should be considered when deciding whether or not to save a tree. Finally, most North American trees rely on a strong central leader to

grow properly. Look for a strong, straight branch that follows the line of the trunk. If this branch is damaged or removed, the tree will begin to sprout side branches that are weakly attached and prone to disease and structural failure. A tree without a strong central branch will probably not thrive for very long.

While it is best to prune healthy branches in March, April or May, a broken or damaged branch should be removed as soon as it is noticed. Once the branch is removed the tree can begin healing the stub left behind. Removing a branch involves a minimum of three steps. The first cut should be placed about 4” out from the trunk, and come up from the bottom, severing the bark for at least 1/3 of the circumference. The next cut will remove the weight of the branch. It will be made outside of the first cut, so that any bark that might peel as the branch falls will end at the first cut. The third cut cleans up the stub. Most trees have collars wherever a branch meets the trunk or a limb. Pruning should always be done just to the outside of the collar, as that is the tissue that will cover the wound. This means that a branch broken halfway out should be cut off where it joins another branch, not necessarily at the site of the break.

There are many products marketed to cover wounds. These are generally not recommended, as they can actually seal in fungus or bacteria. Physical barriers, such as tin or plastic are also great ways to attract insects and infection, instead of preventing their invasion.

Of course, for safety reasons, never attempt to remove large limbs, or anything near a utility line. Contact a professional forester who carries insurance to take care of major trimming or removal of large trees.

If you would like more information on tree care and repair, contact the OSU extension office, or go online to <http://ohioline.osu.edu>.

SPRING 2005 TREE SEEDLING SALE LAKE COUNTY SWCD



Bare root trees and shrubs, ground cover, and native wildflowers for Northeast Ohio climate and soil conditions.



BULK PACKETS

Ideal for planting large open areas, windbreaks or screens, these are single-species packets of trees, wildflowers, or groundcovers.

White Pine - 8-12" - Fast-growing to 100 feet or taller, soft, green needles. Will tolerate wide variety of soil conditions, good for ornamental and Christmas trees. 10 trees per packet.

Blue Spruce - 7-10" - A narrow, upright tree with potential to reach 100 ft, but usually much smaller in our area. Silver-blue foliage make this popular for foliage contrast.

White Flowering Dogwood - 2-3' - 20-40 feet in average to rich, moist soil. White flowers in the spring, red berries in the fall. Dark red to purple fall foliage. 5 trees per packet

Pachysandra - A fine evergreen ground cover. Locally grown and hardy. 1-year plants should cover in two years with 6" spacing. 50 plants per packet

Native Wildflowers - One-ounce packet of native Ohio wildflowers and forbs. Species selection researched in early literature to include only natives. Will cover 250 square feet

HOMEOWNER'S PACKET

Selected for their smaller size and hardiness, these species are ideal for smaller properties and tight spaces. Three of each species per packet, 9 trees total.

Blue Spruce - 7-10" - A narrow, upright tree with potential to reach 100 ft, but usually much smaller in our area. Silver-blue foliage make this popular for foliage contrast.

Hawthorn - 18-24" - Small, sturdy tree with a tendency to spread out to the sides. Hawthorns rarely exceed 30 ft. Red, rose-like fruits in the fall, silvery bark.

Redbud - 2-3' - A very early bloomer with pink flowers long before the leaves emerge. Will reach 25 ft at maturity, and turn yellow in the fall. Does not do well on wet, heavy soils.

FOREST HARDWOOD PACKET

These timber species are a great investment for the future as they reach 75' or higher. Three of each species per packet, 9 trees total.

Sugar Maple - 2-3' - Will grow to 100 feet, with outstanding fall colors. Sugar maples prefer sunny spots will well-drained, moist soils.

Red Oak - 2-3' - A quick-growing tree that can reach 100 feet. Red oaks hold leaves well into winter. Not tolerant of root disturbances.

Tulip Poplar - 2-3' - Broad, upright structure that will reach 100 feet. Tulip trees sport a large green and orange flower that is often overlooked until the petals are on the ground.

FOREST NUT PACKET

A trio of trees with edible nuts. Once they mature, these trees can be harvested for human consumption, or left to attract wildlife. Three of each species per packet, 9 trees total.

White Oak - 2-3' - Slow-growing, rounded tree that will reach 80 feet. Likes clay soils, and will produce many mid-sized acorns.

Black Walnut - 2-3' - A fast-growing tree that prefers wet soils. Highly prized timber tree, as well as a good choice for attracting small mammals. Edible nuts.

Shellbark Hickory - 12-18" - This species also does well in moist soils, and develops a deep taproot. Will reach 80 feet tall, and can tolerate shade when young.

STREAM AND POND PACKET

Chosen for their ability to thrive in wet places, these species are an excellent choice for stabilizing a stream bank, shading a pond, or adding trees to a wet area in your yard. Three of each species per packet, 9 trees total.

Banker's Dwarf Willow - 3' - A 5 foot spreading shrub. Good for stabilizing stream banks as the branches root where they touch the ground. Yellow fall color.

Sycamore - 2-3' - Easily recognized by its white bark, the sycamore often crowds wet areas and river corridors. A large tree that can reach over 80 feet tall with a 60 foot spread. Leaves also over-sized.

Red-osier Dogwood - 2-3' - A beautiful upright shrub with white blossoms in May, with deep red branches. Reaches heights of 6-10 ft. Used for erosion control, stream bank protection, and wildlife food.

WILDLIFE PACKET

Species produce flowers and berries to attract wildlife to your yard. Birds or butterflies will be drawn to these plants throughout most of the year. Three of each species per packet, 9 trees total.

Serviceberry - 18-24" - Striking white flowers in spring, orange fall foliage. Serviceberry trees can be expected to reach 25-35 feet in height, with edible fruits that can be enjoyed by wildlife and humans alike.

Butterfly Bush - 18-24" - Fast-growing to 10-15' if not cut back. Blooms pink to purple in summer, attracts butterflies and hummingbirds

Sargent Crabapple - 2-3' - A horizontal growth structure and crabapples that remain into winter make this a great choice for attracting birds.

BULK TREE ORDERS NEW THIS YEAR.

If you have a large area to cover, we are offering all of our species in bulk quantities (50 trees per species). Please contact the District office to request a bulk order form and inquire about availability.

TREE SALE ORDER FORM

| Qty | Description (# of plants) | Price | Total |
|-------|-------------------------------|-------|----------|
| _____ | *White Pine (10) | \$ 8 | _____ |
| _____ | *Blue Spruce (10) | \$ 8 | _____ |
| _____ | *Flowering Dogwood (5) | \$ 8 | _____ |
| _____ | Pachysandra (50) | \$ 12 | _____ |
| _____ | Homeowners (9) | \$ 12 | _____ |
| _____ | Forest Hardwood (9) | \$ 12 | _____ |
| _____ | Forest Nut (9) | \$ 12 | _____ |
| _____ | Stream and Pond (9) | \$ 14 | _____ |
| _____ | Wildlife (9) | \$ 12 | _____ |
| _____ | Bluebird House | \$ 8 | _____ |
| _____ | Wren House | \$ 8 | _____ |
| _____ | Wood Duck House | \$ 20 | _____ |
| _____ | Bat House | \$ 10 | _____ |
| _____ | Native Wildflower Seed Packet | \$ 10 | _____ |
| _____ | Tree Flags (20) | \$ 1 | _____ |
| | Packaging charge | \$ 3 | \$ 3 |
| | Total Payment: | | \$ _____ |

Name: _____

Address: _____

City, State, ZIP: _____

Phone (day): _____ (evening): _____



Cut here

1. Please fill out the order form above. Send check or money order to:

Lake SWCD
125 East Erie St.
Painesville, OH 44077

Payment must accompany order to be guaranteed!

2. Orders are available for pick-up on Friday, April 15th, 9am-6pm, and Saturday, April 16th, 9am-12pm at the Lake County Fairgrounds, 1301 Mentor Avenue.
3. The deadline for ordering is February 22, 2005, or until supplies are exhausted.
4. We reserve the right to make substitutions if necessary. If ordering close to the deadline, please call prior to placing your order to confirm availability.

5. The plants are nursery inspected to be disease-free. Lake SWCD cannot be responsible for their survival after they have been distributed.

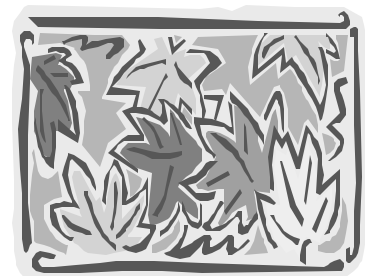
6. The District cannot be responsible for any orders that are not picked up. Please make arrangements for someone to pick up your trees if you are not able to do so. Seedling packets are approximately the size of a grocery bag, so they will transport easily in your car.

7. Planting instructions will be available at pick up.

***8. A 10% discount will be applied when ordering 100+ trees of the same species, in the bulk category. Please call in advance for availability when making large orders.**

Important information:

- ☞ Place orders by February 22, 2005
- ☞ Pay with a check or money order payable to Lake SWCD
- ☞ Pick up trees April 15 from 9 AM to 6 PM or April 16 from 9 AM to Noon
- ☞ Pick up trees at Lake County Fairgrounds, 1301 Mentor Ave.
- ☞ Save bottom portion for your reference
- ☞ Please call the SWCD office with any questions: (440)350-2730
- ☞ Do not use this form for bulk orders other than those listed above.



PROPER TREE AND SHRUB PLANTING FOR THE HOME LANDSCAPE

BY DEB JAROSZ, OSU EXTENSION, LAKE COUNTY MASTER GARDENER

"Planting a tree," my grandfather once told me, "gives a man a measure of immortality. The tree will still be here long after I'm gone."

While we're still here, trees provide immeasurable pleasure in uncounted ways and are the crown jewels of any landscape. But they must be planted properly to start with. The same goes for shrubs.

Ohio State University Extension recommends the following steps for proper planting of trees and shrubs:

Selecting the Right Plant for the Site

This involves matching what the plant needs to the conditions of your site. Considerations should include: amount of sunlight, hardiness zone (Lake County is USDA 5), space for mature size, function (i.e. focal point, screening), aesthetics/design, soil moisture level, drainage, soil texture (sandy, loam, clay) and soil pH (acidic, neutral, alkaline) and nutrient levels (per soil test every 3 years).

Preparing the Site

This step may include correction of drainage problems, weed and grass removal, and bed/soil preparation. Remove weeds and grass by applying a non-residual, non-selective herbicide containing Glyphosate as per label instructions. Wait two weeks after application to plant.

For large multiple planting areas, prepare the entire bed and incorporate up to 20 percent organic matter evenly to a depth of 12 inches (ideally done in spring for fall planting or fall for spring planting).

Working overly dry or wet soils adversely affects the soil structure. When the soil is workable, a ball of soil made in your hand should maintain its shape but crumble with simple pressure.

Preparing the Plant

Proper planting depth is ensured by exposing the root flare (the zone of transition from trunk to root at the base of the trunk). This involves clearing away soil and debris from the trunk just enough to expose the flare and the soil line.

For balled and burlap plants (B&B), be sure to untie the twine and remove the burlap. Measure the root ball height from the flare to the bottom of the plant.

Hole Preparation

The shape and size of the hole (particularly in clay soils) is important for encouraging optimal, healthy root growth. Dig a saucer-shaped hole at least two to three times the width of the root ball at a depth of no greater than the root ball height as measured in step three.

Planting

The primary difference between planting a containerized vs. ball and burlap plant is the treatment of the root ball. Both should be handled by the root mass, avoiding lifting or pulling by the trunk.

For containerized plants, loosen and remove the container. Loosen the root mass, spreading out any encircling roots. If roots are severely pot bound, butterfly cut the

mass with vertical slices 1/3 to 1/2 up from the bottom at four-inch intervals.

Spread roots out over undisturbed, unamended base of hole. Backfill with up to 20 percent organically (organic amendments include: compost, leaf humus, peat moss) amended soil and firm lightly until the soil is level with ground and flare. Create a 2-inch soil berm around the plant just beyond the root ball to hold water.

For B&B plants, lower the ball into the prepared hole, rechecking for proper depth. Without disturbing the root ball, remove all tags, twine, wire and burlap (roll down, cut and remove as far down as possible). Often burlap may be synthetic or treated and removal ensures that root growth will not be hindered. Backfill and finish as noted for containerized plants.

Mulching

Mulching after planting is essential for retaining soil moisture, moderating soil temperature, and preventing surface root damage caused by heaving from freezing and thawing over winter. Apply mulch evenly to a depth of no more than 2 to 3 inches total, starting 4 to 6 inches away from the trunk and extending to the outer edge of the planting hole. Keeping the mulch away from the trunk discourages moisture retention, crown diseases, and pest infiltration.

Watering

Water the root ball and backfill slowly, thoroughly, and immediately after planting. Repeat watering at weekly intervals when rainfall is less than one inch per week or if root ball is dry to a depth of 6 to 8 inches.

Planting media and root ball soils are generally different in composition than backfill and can dry out or retain moisture differently. It is important, therefore, to maintain even moisture to the roots particularly during summer dry spells.



For a free copy of the OSU Extension "Plant It Right" planting guides for trees and shrubs and for annuals and perennials, send a self addressed stamped envelope to OSU Extension, Lake County, 99 East Erie Street, Painesville, OH 44077. Please attach a note that you are requesting the "Plant It Right" guides.

Call the Ohio State University Extension, Lake County Master Gardener Hotline for answers to your home, yard, and garden questions. Master Gardeners combine their enthusiasm and knowledge of gardening with up-to-date research based information from The Ohio State University to provide you with the answer you need. They are available to answer your phone calls during their winter hours (November through February) on Tuesday mornings from 9:00 a.m. to 11:00 a.m. and during their summer hours (March through October) on Monday, Tuesday, and Friday mornings from 9:00 a.m. to 11:00 a.m.

WHO WANTS TO BE A CONSERVATIONIST?

Snow Fun edition. Test your knowledge of winter wildlife habitats, and other things you should know when you go out in the snow.

Answers are on page 5

- 1) Which of the following is not affected by wind chill:
A) Person B) Dog C) Radiator D) Bird
- 2) On the average, one inch of rain is the equivalent of how many inches of snow?
A) 10 B) 1 C) 5 D) 12
- 3) What percentage of fresh snow is composed of actual water molecules?
A) 20 B) 33 C) 50 D) 80
- 4) When dressing for winter weather, you should choose:
A) The warmest, heaviest coat you have
B) All natural fibers
C) The latest high-tech fabrics
D) Several layers that wick away moisture
- 5) Great Horned Owls are currently:
A) Hibernating
B) Nesting
C) Vacationing in Puerto Vallarta
D) Shivering
- 6) Most of our Red-tailed Hawks are currently:
A) Hibernating
B) Nesting
C) Vacationing in Puerto Vallarta
D) Shivering
- 7) When hiking in the woods in winter, you notice a small tree with yellow flowers on it. It is a:
A) Tulip tree B) Witch hazel C) Birch D) Black gum
- 8) You know spring is right around the corner when you hear these frogs calling
A) Spring Peepers
B) Green Frogs
C) Chorus Frogs
D) Wood Frogs

Lake SWCD will not be holding a fish sale this year. Please contact the district office for a list of local sources or other SWCDs that are selling fish if you would like to obtain fish for your pond

LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

125 E. Erie St., Painesville, OH 44077

•440-350-2730 (main number) •FAX 440-350-2601

Toll-free •298-3334 ext. 2730 Madison/Perry

•918-2730 Cleveland/Western Lake County

•1-800-899-LAKE outside Lake County only

Office Hours: Mon.-Fri. 7:30 am-4:00 pm

•E-mail: soil@lakecountyohio.org

•Web site: www.lakecountyohio.org/soil

| | |
|---|----------|
| PAM BROWN, District Secretary/Treasurer | 350-2730 |
| DAN DONALDSON, District Administrator | 350-2030 |
| CHAD EDGAR, Urban Stream Specialist | 350-2032 |
| BETH LANDERS, Education/Information Coordinator | 350-2033 |
| BRETT RODSTROM, Storm Water Specialist | 350-2092 |
| MATTHEW SCHARVER, Resource Protection Technician | 350-2031 |
| AL BONNIS, District Conservationist, NRCS | 350-2730 |
| JOHN NIEDZIALEK, Western Reserve RC&D Coordinator | 350-2034 |

BOARD OF SUPERVISORS

RICHARD BAKER (1997), MADISON, VICE CHAIR

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MEMBER OF:

- American Farmland Trust
 - Lake County Farm Bureau
 - Nursery Growers of Lake County, Inc.
 - National Association of Conservation Districts
 - Ohio Federation of Soil & Water Conservation Districts
-

AN EQUAL OPPORTUNITY EMPLOYER

All Lake SWCD and USDA programs and services are available without regard to race, age, gender, national origin, political beliefs, color, religion, disability, sexual orientation, or marital or family status.

The public is invited to attend Lake SWCD's monthly Board meetings, held the fourth Thursday of each month at 7:00 pm at 125 East Erie St., Painesville. Meeting announcements appear under the public agenda in the News-Herald. Please call in advance to let us know you will be attending.

Lake County Soil & Water
Conservation District
125 East Erie St., Painesville, OH 44077

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Return Service Requested

