DEFENSIBLE SPACE

Defensible Space is the area around a structure where combustible vegetation that can spread fire has been cleared, reduced or replaced. This space acts as a barrier between a structure and an advancing fire.

How Large Should The Defensible Space Be?

You need to clear combustible vegetation in a 100-foot radius from any structure. Your local fire agency may require you to clear additional vegetation by a written letter. You are not required to cross your property line in order to clear the 100 feet. The neighboring property owner may be required to clear the additional distance by the fire agency.

How Do I Maintain The Defensible Space?

- You may plant fire-resistant, irrigated landscaping in the first 50 feet of the 100 feet from your structure. These plants need to be maintained all year around. Note: no irrigated, or non-native landscaping is allowed within an open space easement.
- You need to keep natural vegetation in the remaining 50 feet of the 100 foot space. This would be the area furthest away from your structure. The plants need to be thinned and cut back to no more than 6 inches

- above the ground.
- You may need to do this several times a year since the plants grow back.
- Do not completely remove all vegetation which would leave the ground bare. Some vegetation is necessary to prevent erosion. When native vegetation is removed for fire control the bare soil is particularly vulnerable to soil erosion.
- Do not remove or disturb the existing plant root system to prevent any future erosion.
- · Remove dead and dying vegetation.
- · Trim trees that overhang or touch your structures.
- Properly irrigating plants will help prevent plants from igniting. Wildfires rarely occur until after June, because as little as 1 inch of water per month keeps drought adapted plants from readily burning. Permanent irrigation should be confined to landscaping within the first 50 feet of a structure.
- Trees and shrubs can be maintained by deep watering at least once a month for drought tolerant species and once a week for high water requiring plants.

What Types Of Fire-Resistant Plants Should I Choose For My Defensible Space?

You will find a list of suggested plants for Defensible Space in this handout. Generally these plants:

- · Grow close to the ground.
- · Have a low sap or resin content.
- Grow without accumulating dead branches, needles or leaves.
- · Are easily maintained and pruned.
- · Are drought-tolerant

HOW DO I CLEAR LEGALLY?

Combustible vegetation can only be removed by mowing, cutting and grazing as long as the root structure is left intact. Any trees you remove shall have the stumps cut no higher than 8" above the ground. The only exception would be an orchard. Orchard trees may have their stumps completely removed.

CAN I CLEAR INTO OPEN SPACE?

If an open space easement is located on your property you may legally clear the 100 feet from your structure, even if it takes you into that easement, upon written authorization of your fire protection district. No irrigated, or non-native land-scaping is allowed within an open space easement.

WHAT IS COMBUSTIBLE VEGETATION?

Combustible vegetation is any material that left in its natural state will readily ignite, burn and cause fire to move to any structure or other vegetation. This would include dry grass, brush, weeds, litter and waste. This would not include fire resistant landscaping some of which can be found in the "Suggested Plant List For Defensible Space" on page 5 of this handout.

OTHER PRECAUTIONS TO CONSIDER:

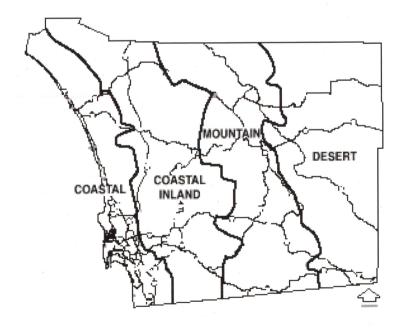
What Ttypes Of Plants Should I Avoid Planting On My Property?

Included in this handout you will find an extensive list of plants that you should avoid. These plants and trees burn easily since they have large amounts of oil, sap, rough bark and other material that is flammable.

What Other Things Should I Do To Protect My Property Against Fire?

- Vary the height of plants and adequately space them.
 Taller plants need to be spaced wider apart.
- Existing trees and large shrubs should be pruned by cutting off any branches up to 6 feet above the ground to prevent ground fires from spreading upwards into trees.
- For fire truck access, remove vegetation within 10 feet of each side of your driveway.
- · Remove any tree limbs within 10 feet of your chimney.
- Work with your neighbors to clear common areas between houses, and prune areas of heavy vegetation that are a fire threat to both properties.
- Avoid planting trees under or near electrical lines. They
 may grow into or make contact with overhead lines.
 Under windy conditions these instances may cause a fire.

- If you have a heavily wooded area on your property, removing dead, weak or diseased trees may improve growing conditions. This will leave you with a healthy mixture of both new and older trees.
- Any removed trees may be chipped and left on your property if they don't present a fire hazard. Contact your local fire agency to find out how to do this.
- Don't forget to legally dispose of all your cut vegetation.
 You may contact your local landfill to inquire about green waste recycling. Open burning may not be allowed.
 Contact your fire agency for more information.
- Stack firewood and scrap wood piles at least 50 feet from any structure and clear away any combustible vegetation within 10 feet of the piles. Many homes have "survived" as a fire moved past it, only to burn later from a wood pile that caught fire after the firefighters had moved on to protect other homes.
- Check and clean your roofs and gutters on all structures several times during the spring, summer and fall to remove debris that can easily ignite from a spark.



SAN DIEGO COUNTY CLIMATE ZONES

KEY

C - COAST

D - DESERT

I - INLAND, COASTAL

M - MOUNTAIN

Acceptable Plants For A Defensible Space In Fire Prone Areas

All plants on the following list are considered drought-tolerant in the climate zone indicated. However, remember that no plant is totally fire resistant. Drought-tolerant plants are trees, shrubs, groundcovers, and other vegetation that can grow and reproduce with only natural moisture such as rainfall. Occasional irrigation is necessary only in extreme drought situations.

Plants that are indicated by the "R" are the least drought-tolerant plants on the list. These plants grow best in riparian areas. Riparian areas can be described as areas where the water table is very near the surface of the ground. Although the ground may be dry, the plants growing there will be green and lush all year around.

When first planting drought-tolerant plants, you need to water deeply to encourage the roots to find natural moisture in the soil. This type of watering needs to continue for at least three years. More water should be provided in summer and less (if any) in the winter. After three years, you should be watering the plants less and depending more on the natural rainfall to provide moisture.

Plants on the list which are noted with ** are San Diego County native or naturalizing plant species. These are types of plants native to or brought into the San Diego County area. These plants are able to grow and reproduce in the local climate and the natural rainfall is enough moisture.

SUGGESTED PLANT LIST FOR A DEFENSIBLE SPACE

TREES

BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Acer platanoides rubrum saccharinum saccharume macrophyllum Alnus rhombifolia Aloe arborescens Arbutus unedo	Norway Maple Red Maple Silver Maple Sugar Maple Big Leaf Maple White Alder Tree Aloe Strawberry Tree	M M M C/ (R) C/I/M(R) All zones	stolonifera Eriobotrya japonica Erythrina caffra Gingko biloba "Fairmount" Gleditisia triacanthos Juglans californica hindsii	Redtwig Dogwood Loquat Kaffirboom Coral Tree Fairmount Maidenhair Tree Honey Locust California Walnut California Black Walnut	I/M I/M C/I/D C I/M I/D/M
Archontophoenix cunninghamiana	King Palm	All zones	Lagerstroemia indica Ligustrum lucidum	Crape Myrtle Glossy Privet	C/I I/D/M
Arctostaphylos spp.** Brahea armata edulis	Manzanita Blue Hesper Palm Guadalupe Palm	C C/I/D	Liquidambar styraciflua Liriodendron tulipifera Lyonothamnus floribundus ssp. Asplenifolius	Sweet Gum Tulip Tree Fernleaf Catalina Ironwood	I C/I/M
Ceratonia siliqua	Carob	C/D	Melaleuca spp.	Melaleuca	С
Cerdidium floridum	Blue Palo Verde	C/D	Parkinsonia aculeate	Mexican Palo Verde	C/I/D
Cercis occidentalis** Cornus nuttallii	Western Redbud Mountain Dogwood	C/I/D D C/I/M	Pistacia chinensis vera Pittosporum	Chinese Pistache Pistachio Nut	C/I C/I/D I

BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
phillyraeoides viridiflorum	Willow Pittosporum Cape Pittosporum	C/I/D C/I	parvifolia pumila	Chinese Elm Siberian Elm	C/M C/I
Platanus	cape i mosperam		Umbellularia californica**	California Bay Laurel	0/1
acerifolia acemosa**	London Plane Tree California Sycamore	All zones C/I/M		-	
Populus alba	White Poplar	D/M			
fremontii** trichocarpa	Western Cottonwood Black Cottonwood	I I/M			
Prunus xblireiana caroliniana ilicifolia** yonii** serrulata 'Kwanzan' yedoensis 'Akebono'	Flowering Plum Carolina Laurel Cherry Hollyleaf Cherry Catalina Cherry Flowering Cherry Akebono Flowering Cherry	M C C C M			
Quercus agrifolia** engelmannii** suber	Coast Live Oak Engelmann Oak Cork Oak	C/I I C/I/D			
Rhus lancea** Salix spp.**	African Sumac Willow	C/I/D All zones (R)			
Tristania conferta Ulmus	Brisbane Box	C/I I/D			Para
					Page



BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Agave americana deserti shawi**	Century Plant Century Plant Shawis Century Plant	D D D	Elaeagnus pungens Encelia**	Silverberry	C/I/M
Amorpha fruticosa**	False Indigobush	Ī	californica farinosa	Coast Sunflower White Brittlebush	C/I
Arbutus menziesii** Arctostaphylos spp.**	Madrone Manzanita	C/I C/I/D	Eriobotrya deflexa Eriophyllum	Bronze Loquat	D/I C/I
Atriplex** canescens lentiformis	Hoary Saltbush Quail Saltbush	D	confertiflorum** staechadifolium Escallonia spp.	Golden Yarrow Lizard Tail Escallonia	C/I C C/I
Baccharis** glutinosa pilularis Carissa grandiflora	Mule Fat Coyote Bush Natal Plum	C/I C/I/D C/I	Feijoa sellowiana Fouqueria splendens Fremontodendron**	Pineapple Guava Ocotillo	C/I/D D
Ceanothus spp.** Cistus spp.	California Lilac Rockrose	C/I/M C/I/D	californicum mexicanum Galvezia	Flannelbush Southern Flannelbush	I/M I
Cneoridium dumosum** Comarostaphylis** diversifolia	Bushrue Summer Holly	C	juncea speciosa Garrya	Baja Bush-Snapdragon Island Bush-Snapdragon	C
Convolvulus cneorum Dalea	Bush Morning Glory	C/I/M	elliptica flavescens**	Coast Silktassel Ashy Silktassel	C/I I/M
orcuttii spinosa**	Orcutt's Delea Smoke Tree	D I/D	Heteromeles arbutifolia**	Toyon	C/I/M

BOTANICAL NAME	COMMON NAME	ZONE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Lantana spp. Lotus scoparius	Lantana Deerweed	C/I/D C/I	Quercus dumosa**	Scrub Oak	C/I
Mahonia spp. Malacothamnus clementinus fasciculatus** Melaleuca spp. Mimulus spp.** Nolina parryi parryi ssp. wolfii	Barberry San Clemente Island Bush Mallor Mesa Bushmallow Melaleuca Monkeyflower Parry's Nolina Wolf's Bear Grass	C/I/M V C C/I C/I/D C/I (R)	Rhamus alaternus californica** Rhaphiolepis spp. Rhus integrifolia** laurina lentii ovata**	Italian Blackthorn Coffeeberry Rhaphiolepis Lemonade Berry Laurel Sumac Pink-Flowering Sumac Sugarbush	C/I C/I/M C/I/D C/I C/I C/D I/M
Photinia spp. Pittosporum crassifolium rhombifolium tobira 'Wheeleri'	Photinia NCN Queensland Pittosporum Wheeler's Dwarf	All Zones CI/I C/I C/I/D	trilobata** Ribes viburnifolium speciosum** Romneya coulteri	Squawbush Evergreen Currant Fuschia-Flowering Gooseberry Matilija Poppy	C/I C/I/D
undulatum viridiflorum Plumbago auriculata Prunus	Victorian Box Cape Pittosporum Cape Plumbago	C/I C/I C/I/D	Rosa californica** minutifolia Salvia spp.**	California Wild Rose Baja California Wild Rose Sage	C/I C/I All Zones
caroliniana ilicifolia** lyonii** Puncia granatum	Carolina Laurel Cherry Hollyleaf Cherry Catalina Cherry Pomegranate	C C C C/I/D	Sambucus spp.** Symphoricarpos mollis** Syringa vulgaris Tecomaria capensis	Elderberry Creeping Snowberry Lilac Cape Honeysuckle	C/I/M C/I M C/I/D
Pyracantha spp.	Firethorn	All Zones	Teucrium fruticans	Bush Germander	C/I



BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Toxicodendron**			Yucca**		
diversilobum	Poison Oak	I/M	schidigera	Mojave Yucca	D
Verbena			whipplei	Foothill Yucca	1
lilacina	Lilac Verbena	С			
Xylosma congestum	Shiny Xylosma	C/I			
GROUNDCOV	ERS				
		01.154.475	ROTANICAL NAME	COMMON NAME	CLIMATE

BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Achillea**	Yarrow	All Zones	virens	Island Live Fore-ever	C
Aptenia cordifolia	Red Apple Ice Plant	С	Eschscholzia californica**	California Poppy	All Zones
Arctostaphylos spp.** Baccharis**	Manzanita	C/I/D	Euonymus fortunei 'Carrierei'	Glossy Winter Creeper	M
pilularis	Coyote Bush	C/I/D	'Coloratus'	Purple-Leaf Winter Creeper	M
Ceanothus spp.**	California Lilac	C/I/M	Ferocactus viridescens**	Coast Barrel Cactus	С
Cerastium tomentosum	Snow-in-Summer	All Zones	Gaillardia grandiflora	Blanket Flower	All Zones
Coprosma kirkii	Creeping Coprosma	C/I/D	Gazania spp.	Gazania	C/I
Cotoneaster spp.	Redberry	All Zones	Helianthemum spp.**	Sunrose	All Zones
Drosanthemum hispidum	Rosea Ice Plant	C/I	Lantana spp.	Lantana	C/I/D
Dudleya brittonii pulverulenta**	Brittonis Chalk Dudleya Chalk Dudleya	C C/I	Lasthenia californica**	Common Goldfields	1

BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
glabrata Lupinus spp.** Myoporum spp. Pyracantha spp. Rosmarinus officinalis Santolina	Coastal Goldfields Lupine Myoporum Firethorn Rosemary	C C/I/M C/I All zones C/I/D	Trifolium frageriferum Verbena rigida Viguiera laciniata** Vinca minor	O'Connor's Legume Verbena San Diego Sunflower Dwarf Periwinkle	C/I All Zones C/I M
chamaecyparissus virens	Lavender Cotton Santolina	All Zones All Zones			

VINES

BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Antigonon leptopus Distictis buccinatoria Keckiella cordifolia**	San Miguel Coral Vine Blood-Red Trumpet Heart-Leaved Penstemon	C/I C/I/D C/I
Lonicera japonica 'Halliana' subspicata**	Hall's Honeysuckle Chaparral Honeysuckle	All Zones C/I
Solanum jasminoides	Potato Vine	C/I/D



BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	
Lupinus spp.**	Lupine	C/I/M	
7			



BOTANICAL NAME	COMMON NAME	CLIMATE ZONE	BOTANICAL NAME	COMMON NAME	CLIMATE ZONE
Coreopsis			Satureja douglasii	Yerba Buena	C/I
gigantean	Giant Coreopsis	C	Sisyrinchium		
grandiflora	Coreopsis	All Zones	bellum	Blue-Eyed Grass	C/I
maritime	Sea Dahlia	C C/I	californicum	Golden-Eyed Grass	С
verticillata	Coreopsis		Solanum		
Heuchera maxima	Island Coral Bells	C/I	xantii	Purple Nightshade	C/I
Iris douglasiana**	Douglas Iris	C/M	Zauschneria**		
Iva hayesiana**	Poverty Weed	C/I	californica	California Fuschia	C/I
Kniphofia uvaria	Red-Hot Poker	C/M	cana	Hoary California Fuschia	C/I
Lavandula spp.	Lavender	All Zones	'Catalina'	Catalina Fuschia	C/I
Limonium californicum					
var. mexicanum	Coastal Statice	С			
perezii	Sea Lavender	C/I			
Oenothera spp.	Primrose	C/I/M			
Penstemon spp.**	Penstemon	C/I/D			

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plant-

ings with a high dead to live fuel ratio. Many of these species, if existing on the property and adequately maintained (pruning, thinning, irrigation, litter removal, and weeding), may remain as long as the potential for spreading a fire has been reduced or eliminated.

BOTANICAL NAME	COMMON NAME	BOTANICAL NAME	COMMON NAME
Abies species	Fir Trees	Cupressus glabra	Arizona Cypress
Acacia species	Acacia (trees, shrubs, groundcovers)	Cupressus sempervirens	Italian Cypress
Adenostoma sparsifolium**	Red Shanks	Dodonea viscosa	Hopseed Bush
Adenostoma fasciculatum**	Chamise	Eriogonum fasciculatum**	Common Buckwheat
Agonis juniperina	Juniper Myrtle	Eucalyptus species	Eucalyptus
Araucaria species	Monkey Puzzle, Norfolk Island Pine	Heterotheca grandiflora**	Telegraph Plant
Artemesia californica**	California Sagebrush	Juniperus species	Junipers
Bambusa species	Bamboo	Larix species	Larch
Cedrus species	Cedar	Lonicera japonica	Japanese Honeysuckle
Chamaecyparis species	False Cypress	Miscanthus species	Eulalia Grass
Coprosma pumila	Prostrate Coprosma	Muehlenbergia species**	Deer Grass
Cryptomeria japonica	Japanese Cryptomeria	Palmae species	Palms
Cupressocyparis leylandii	Leylandii Cypress	Picea species	Spruce Trees
Cupressus forbesii**	Tecate Cypress	Pickeringia Montana**	Chaparral Pea
			1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1

UNDESIRABLE PLANT LIST CONTINUED

BOTANICAL NAME	COMMON NAME	BOTANICAL NAME	COMMON NAME
Pinus species	Pines	Taxus species	Yew
Podocarpus species	Fern Pine	Thuja species	Arborvitae
Pseudotsuga menziesii	Douglas Fir	Tsuga species	Hemlock
Rosmarinus species	Rosemary	Urtica urens**	Burning Nettle
Salvia mellifera**	Black Sage		
Taxodium species	Cypress		

^{**} San Diego County native species

References: Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

Willis, E. 1997. San Diego County Fire Chief's Association. Wildland/Urban Interface Development Standards

City of Oceanside, California. 1995. Vegetation Management. Landscape Development Manual. Community Services Department, Engineering Division.

City of Vista, California 1997. Undesirable Plants. Section 18.56.999. Landscaping Design, Development and Maintenance Standards.

www.bewaterwise.com. 2004. Fire-resistant California Friendly Plants.

www.ucfpl.ucop.edu. 2004. University of California, Berkeley, Forest Products Laboratory, College of Natural Resources. Defensible Space Landscaping in the Urban/Wildland Interface. A Compilation of Fire Performance Ratings of Residential Landscape Plants.

County of Los Angeles Fire Department. 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable Plant List.

INVASIVE PLANT LIST

The following species are considered invasive (i.e., those capable of reproducing and spreading into native, non-irrigated areas and displacing those communities). Non-native plant species are prohibited in all areas adjacent to open space lands. Noxious weeds that have been introduced to San Diego County over the years tend to be more widespread

and therefore more difficult to contain. The plants listed below have been identified as invasive and/or as noxious weeds and should not be planted or allowed to sprout in any transitional landscapes (landscapes planted with non-native species next to undeveloped areas).

BOTANICAL NAME	COMMON NAME	BOTANICAL NAME	COMMON NAME
Ailanthus altissima Anthemis cotula*** Arctotheca calendula Arundo donax Atriplex semibaccata Brassica species*** Cardaria draba*** Carpobrotus edulis Centaurea solstitialis Cirsium vulgare***	Tree of Heaven Mayweed, Stinking Chamolile Cape Weed Giant Cane Australian Saltbush Mustard Hoary Cress, Perennial Peppergrass Ice Plant Yellow Starthistle Wild Artichoke	Cupressus macrocarpa Cynara cardunculus*** Cytisus species Elaeagnus angustifolia Eucalyptus globulus Gensita species*** Hedera helix Hypericum perforatum Ilex aquifolium Lactuca serriola***	Monterey Cypress Artichoke Thistle Scotch Broom, French Broom, etc Russian Olive Eucalyptus Blue Gum Broom English Ivy St. John's Wort English Holly
Conium maculatum Conyza Canadensis*** Cortaderia selloana Cotoneaster lacteus	Poison Hemlock Horseweed Pampas Grass Cotoneaster	Lepidium latifolium Myoporum parvifolium Nerium oleander Nicotiana species	Prickly Lettuce Perennial Pepperweed Trailing Myoporum Oleander Tree Tobacco

INVASIVE PLANT LIST CONTINUED

BOTANICAL NAME	COMMON NAME	BOTANICAL NAME	COMMON NAME
Olea europaea	Olive	Silybum marianum***	Milk Thistle
Pennisetum setaceum	Fountain Grass	Spartium junceum	Spanish Broom
Ricinus communis	Castor Bean	Tamarix species	Tamarisk
Robinia pseudoacacia	Black Locust	Ulex europea***	Gorse
Salsola australis***	Russian Thistle, Tumbleweed	Vinca major	Periwinkle
Schinus molle	California Pepper		
Schinus terebinthifolius	Brazilian Pepper		

^{***} Introduced Weeds to San Diego County

References: Bell, Carl, Regional Advisor - Invasive Plants. 2004. University of California Cooperative Extension.

California Exotic Pest Plant Council. October, 1999. Exotic Pest Plants of Greatest Ecological Concern in California. Most Invasive Wildland Pest Plants. www.caleppc.org/info/99lista.html.

FIRE AGENCY CONTACT LIST

-					
ALPINE	(619) 445-2635	SAN MIGUEL	(619) 670-0500		
NORTH COUNTY	(760) 723-2010	JULIAN-CUYAMACA	(760) 765-1510		
BONITA-SUNNYSIDE	(619) 479-2346	VALLEY CENTER	(760) 751-7600		
PAUMA VALLEY	(760) 742-3704	LAKESIDE	(619) 390-2350		
BORREGO SPRINGS	(760) 767-5436	ext. 306			
PINE VALLEY	(619) 473-8445	VISTA	(760) 639-6140		
DEER SPRINGS	(760) 749-8001	NATIONAL CITY	(619) 336-4550		
RAMONA	(760) 788-2244	California Department of Forestry			
EAST COUNTY FIRE		and Fire Protection	(619) 590-3100		
PROTECTION DISTRICT	(619) 579-6034	United States Forest Service (619) 674-2901			
RANCHO SANTA FE	(858) 756-5971	Department of Planning and Land Use,			
ENCINITAS	(760) 633-2820	General Information	(858) 694-2960		
		County Farm and Home Advisor (858) 694-2845			
SAN DIEGO RURAL (619) 669-1188		Insurance Information Network of California			
ESCONDIDO	ONDIDO (760) 839-5400		Brochures (www.iinc.org) or call (800) 397-1679		
SAN MARCOS (760) 744-1050 ext 3404		Discharcs (www.iirio.org) or can (000) 331-1019			