

Renovate/PlusTM

Recovery Amendment

EARTHWORKS NATURAL ORGANIC PRODUCTS, INC.

A 50:50 BLEND OF RENOVATE AND ECO-LITE

Renovate/Plus is an Ideal Amendment for:

GOLF COURSE GREENS AERIFICATION
SODDING AND SEEDING PROJECTS
SPORTS TURF RECOVERY
LANDSCAPE PLANTINGS

RECOVERY OF "DEAD SPOTS"
NEW CONSTRUCTION
BIOLOGICAL REPLENISHMENT
DIVOT MIX

Renovate/Plus is the combination of EarthWorks **Renovate** and **Eco-Lite** and is a powerful amendment that will open tight soils, speed turf recovery, and stimulate soil biology without a big nitrogen push. This combination allows for oxygen movement through the soil and promotes an active microbial generated nitrogen cycle. This product is ideal for numerous projects on the golf course or sports field and can "save" those hard to grow areas. **Renovate/Plus** is the combination of all the raw materials found in The EarthWorks "Construction Program" which has been a huge success since the early 1990's, and has been the amendment program of choice for hundreds of golf courses as well as professional sports stadiums and other athletic fields. **Renovate/Plus** encourages quick recovery of "dead spots," is the ideal product to put under any sod job, and can replace multiple aerification products to simplify those projects and significantly increase their success rate. **Renovate** is a blend of organic and mineral amendments including kelp meal, compost and humic acids which make up a sustainable microbial food source of short, medium and long chained carbons. The diversity of ingredients allows for a quick jump-start of soil activity, but one that will also be sustainable. The mineral fraction of **Renovate** includes greensand, sul-po-mag, hard and soft rock phosphate, and calcium. This combination prevents de-mineralization of the soil and allows for roots to take up nutrients as needed, and is a great way to provide a biological foundation to any soil by promoting soil flocculation and turf recovery. **Eco-Lite** is the premier zeolite rock mineral mined from an exceptionally clean zeolite mine and provides an array of physical benefits including the highest CEC of all physical amendments. Zeolites are very hard rock minerals that possess a crystalline structure and have the capability to absorb water when the surrounding soil is wet, creating better air movement in the soil and allowing for the controlled release of this water when moisture levels in the soil fall. Perhaps the greatest difference between **Eco-Lite** and other physical amendments is its affinity to hold both ammonium nitrogen and potassium, allowing for both nutrients to be more available to the plant over a longer period of time.

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**RENOVATE
Plus
ECO-LITE**

Ecolite - Zeolite

Kelp Meal

Greensand

Compost

*Hard Rock
Phosphate*

*Soft Rock
Phosphate*

*Humic/Fulvic
Acids*

Sul-Po-Mag

Renovate/Plus™

Recovery Amendment

Renovate/Plus has a multitude of applications on golf courses, sports turf and landscaping situations. A combination of EarthWorks **Renovate** and the physical amendment **Eco-Lite**, this product can assure the success of sod jobs, improve aeration projects, help recover worn out dead spots and is an ideal divot mix and planting amendment. **Renovate/Plus** is formulated from the following amendments in order of volume:

Eco-Lite™: A Zeolite rock mineral mined from the cleanest known mine in New Mexico. Eco-Lite provides numerous benefits to the soil profile. First and perhaps most significantly, this mineral has the highest CEC value of any popular physical amendment ~ as much as three times higher than calcined clays and diatomaceous earth. Eco-Lite also has a very high water holding capacity which allows excess water to be pulled into its crystalline structure to dry up wet soils but allowing for its release osmotically as water pressure drops outside the mineral structure. This phenomena also explains how this mineral can create more air pore space. The most unique benefit from Eco-Lite is its strong affinity to hold ammonium and potassium while not having the same affinity for sodium. Eco-Lite becomes a sustainable mineral form of potassium preventing the leaching of more soluble forms.

Dry Kelp Meal: A very digestible food source for micro-organisms. Rich in over 60 minerals, 21 Amino Acids and 12 Vitamins, *ascophyllum nodosum* is also a rich source of plant gibberellins and cytokinins which act as plant growth regulators. Kelp extract also provides polysaccharides, which are complex sugars, which along with its vitamins, minerals and amino acids greatly assists in the feeding of soil beneficial micro flora.

Greensand: A potassium silica rock mineral rich in sustainable and available potassium, iron and many other trace nutrients. This is a mica like rock mineral that holds its own weight in water and is an excellent soil conditioner.

Compost: Rich compost, produced on Amish farms in Pennsylvania, provides a stable form of carbon and minerals. Produced from stabilized manures, this product has gone through two digestions, producing an extremely biologically active material and a readily available food source for beneficial micro-organisms.

Hard Rock Phosphate: This is the mineral that is acidified to create the commonly used soluble phosphorous fertilizers. There are studies that show this sustainable rock mineral to be as available as its soluble counterparts when chemical tie-up is taken into account. It is used as a very sustainable form of phosphorus; one that organic acids produced by plant root systems can digest when phosphorus is needed.

Soft Rock Phosphate: A colloidal form of phosphorus. This mineral is available over a wider range of soil pH and provides a certain solubility not found in its hard rock counterpart.

Humic acid and Fulvic acids: An alkaline extract of geologically concentrated humus, rich in organic acids that stimulate beneficial soil fungi, act as chelating agents for micro-nutrients and perform as sequestering agents to help fracture bonds between phosphorus and iron/calcium/aluminum.

Sul-Po-Mag: A mineral that provides the soil with needed sulfur, potassium and magnesium as well as a host of other trace nutrients. Magnesium is a very important nutrient in the photosynthesis process. This mineral is a very good soil conditioner and is fairly soluble.

APPLICATION RATES:

Apply 25-50 lbs./1000 sq. ft. preferably in combination with aeration or worked into the top few inches of soil. Lighter top dressings can also be very beneficial. Continued use is important especially on heavily compacted and biologically weak soils or sand based soils.