



WHITETAIL INSTITUTE IMPACT:

A TRUE LIME ALTERNATIVE

Food plotters now have a great alternative to boost soil pH at remote locations or before the fall growing season.

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INSET PHOTO BY W. CARROLL JOHNSON III, PH.D.



IMPERIAL WHITETAIL

IMPACT SOIL AMENDMENT

■ Create high-yielding, nutritious food plots in areas anywhere bulk or pellet lime is not an option. Depending on soil type and rainfall amounts, Impact can improve forage quality and growth for three to five months with one application.

Great for annual plantings. Perennial plots could need two or three applications.



Soil pH is the most important factor you can control to ensure food plot success. Whitetail Institute Impact is a new tool for food plotters that increases soil pH without lime. It's ideal for remote plot locations where liming isn't an option, and to provide an immediate short-term boost to soil pH for optimum food plot growth.

Soil pH is the most important part of seedbed preparation. In fact, making sure that soil pH is optimum before you plant can make the difference between the best food plot and failure. Soil pH is a direct measurement of how well — or poorly — your forage crop can uptake nutrients from the soil. Unless soil pH is optimum (6.5 or higher for most high-quality food plot plants), nutrients are bound up in the soil, and plants cannot access them.

The best course to correct the pH of acidic soil is to incorporate lime into the seedbed well before planting. In some cases, though, it's not possible to add lime to a remote seedbed or access a plot with tillage equipment. In such cases, Impact can be a life saver. It's also perfect for providing a rapid increase in soil pH, even in plots that have been recently limed. Impact bridges the gap while slower activating ag lime starts to work.

Several other products claim to increase soil pH. Unfortunately, some do not live up to their marketing hype. How do you know that Impact actually increases soil pH? By its stated CCE, which you'll find on the label.

IMPACT INCREASES SOIL PH

Before buying, look for a calcium carbonate equivalent, or CCE. The preferred way to increase the soil pH of a seedbed is to incorporate lime by disking or tilling. Lime is all or mostly calcium carbonate. Keep in mind what's important about that: carbonate. The carbonate part of calcium carbonate actually increases soil pH, not the calcium. Calcium just acts as a sort of carrier for the carbonate.

You don't have to be a chemistry expert to understand what that means. It's easy, and understanding it also ensures you don't get duped into buying a product that claims to increase soil pH when it doesn't.

Calcium carbonate increases soil pH. Calcium chloride does not. Let's say you're considering using something other than lime to increase soil pH. How can you know how well — or poorly — it will work? Just compare it to a known standard — in this case, how well lime (calcium carbonate) would do the job. That comparison is stated as a product's CCE. For example, something that increases soil pH as well as lime would have a CCE of 100 percent. A product that's only half as effective as lime for increasing soil pH has a CCE of 50 percent.

Compare that to recently introduced calcium chloride products that are advertised as lime substitutes. Calcium chloride has a CCE of 0. They don't increase soil pH. Before you buy a non-lime product advertised as increasing soil pH, make sure what it is (and is not).

If a product actually increases soil pH, it should have a CCE stated in its documentation or packaging. If it doesn't, that should be a red flag. Search for the product you're considering and its SDS. That will reveal the product's safety data sheet and tell you what the substance is. Don't be fooled by suggestions that calcium chloride increases soil pH. It doesn't. Period.

Like carbonates, oxides also increase soil pH. Impact is an oxide that has as CCE of 68 percent, meaning it has 68 percent of the soil neutralizing ability of limestone. As such, it's not a full substitute for incorporating lime into an acidic seedbed. However, it will help increase soil pH if liming isn't an option. Unlike lime, Impact increases soil pH almost immediately, and it even has a starter fertilizer that contains nitrogen and potassium, and makes them immediately available to plants.

Guaranteed Analysis

Total Nitrogen (N).....	8%
Soluble Potash (K2O).....	40%
Calcium Carbonate Equivalent.....	68%
Proprietary & Inert Ingredients.....	52%
Percent of solids passing through a 325 Mesh screen in liquid form	100%
Can be applied directly to the soil or as a foliar spray 100% absorption and availability	
Very low salt index: 10	

IMPACT (25 LBS./A)



NONTREATED (NO LIMING MATERIAL)



- IMPACT FOR NO-PLOW

This is a field demonstration in Upson County, Georgia, on Davidson clay loam soil. Impact was sprayed and No-Plow seeded Sept. 22, 2020. The pH of the nontreated plot was 5.5. The pH of the Impact plot was 5.8, plus a significant increase in soil potassium. This picture was taken on Nov. 8, 2020. Notice the differences in foliage density and the overall vigor of No-Plow from Impact applied immediately before planting.

IMPACT (12.5 LBS./A)



NONTREATED (NO LIMING MATERIAL)



- IMPACT FOR WHITETAIL OATS PLUS

This trial location was in southern Georgia, on Tifton loamy sand soil. The pictures were taken March 4, 2020, about four-and-a-half months after treatment and seeding with Oats Plus. Notice the improved crop vigor and overall growth after the Impact treatment compared to the nontreated plot.

SOIL TEST KIT

Whitetail Institute Soil Test Kits provide the data you need for great food plots. Professional laboratory soil testing is one of the most important things you can do to ensure food plot success. The Whitetail Institute offers professional results and recommendations for all Imperial Whitetail products, as well as other crops. Accurate fertilizer and lime recommendations are provided.

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How can Impact benefit your food plot efforts? Lime is the best substance for most people to use in increasing soil pH, but there will always be situations in which liming an acidic seedbed isn't an option. One reason is the large amounts of lime that are usually needed to increase soil pH — often tons per acre, which can be difficult to transport to remote sites. Also, lime should be disked or tilled into the soil for optimum results, you can't access some sites with heavy equipment. Impact is a great second-best option for folks who can't get lime or equipment to a remote plot. It's sprayable and can be easily transported to remote sites on an ATV or UTV.

Impact can also be a cost-effective option for people who only want to increase soil pH for the start of the fall growing season — for example, if they only have a one-year lease. In such cases, Impact can provide a short-term boost in soil pH for planting annuals for one year.

Impact also increases soil pH almost immediately — much more quickly than

	pH	P	K	Ca	Mg
Impact (25 lbs./A)	5.8	109	510	1504	309
Pelleted dolomitic lime (1000 lbs./A)	5.7	37	312	1480	339
Nontreated	5.5	72	365	1531	281

lime — which might make it an even better option than lime for neutralizing soil at a last-minute plot or to bridge the gap with a rapid soil pH boost after liming until the lime catches up.

Here are the results of a Whitetail Institute test performed on No-Plow in Georgia. Laboratory soil testing before planting showed that the fallow site, an old logging road, had highly acidic soil. One side was treated with Impact before planting, and the other side was limed at a rate of 1,000 pounds per acre. Both sides were equally fertilized with 10-10-10 and planted. Soil tests were performed again three weeks after planting.

Whitetail Institute has always rec-

ommended the use of mined, crushed limestone rock in ag lime or pelleted lime form for increasing soil pH in acidic seedbeds, and that hasn't changed. If you can't get lime or heavy equipment to the site, though, or want to give soil pH a quick boost, Impact is designed to do the job. It should be sprayed immediately before or after planting and, if needed, can be applied twice, a month apart. Impact reacts immediately after the first rainfall, and its effects last three to five months per application.

For information, visit whitetailinstitute.com, or call (800) 688-3030.



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