STANLEY

spatial harvest scheduling

Stanley is spatial harvest scheduling software that automates the process of creating and scheduling harvest blocks or units on your GIS maps.

A powerful planning software tool, Stanley takes the requirements of the landscape-level plan from Woodstock, along with any spatial constraints, such as adjacencies, opening size limitations and user-specified regulations (accommodating special sites, for instance) and generates harvest block schedules that meet all of your criteria.
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WHAT IS STANLEY AND WHAT DOES IT DO?

Stanley is a commercial software package that automates the process of developing a spatial harvest plan.

Specifically, Stanley takes a subset of the Woodstock strategic plan and creates a site-specific harvest plan. It assigns harvest treatments to stands / polygons and groups them together into well-designed harvest units reflecting the objectives you specified in the Woodstock model, plus any spatial requirements you’ve defined.

Stanley takes a subset of the Woodstock strategic plan and creates a site-specific harvest plan.

These on-the-ground harvest block/unit schedules observe landscape-level objectives (wood flows, habitat levels, biodiversity targets etc.) set out in your strategic plan (Woodstock model) while also respecting all your spatial criteria at the same time.

DOES STANLEY PRODUCE A SINGLE SCHEDULE OR A NUMBER OF OPTIONS?

Either - but most users choose Stanley to produce multiple solutions, prioritizing those that best satisfy their overall objectives and requirements.

Stanley enables you to store multiple solutions – which means you can save the top 10 Stanley solutions (or more) and then compare them to see the full range of solutions available.

This can be useful because it lets you see how a small step down in the overall solution may offer some significant benefit in another area. For example, when you compare your solutions, you see that the ones that are just slightly less optimal offer a much better solution in terms of wildlife habitat. In that case, you may choose to accept the lower solution or you may go back and tweak with your model or the Stanley settings to address the issue.
WHY USE STANLEY?

Because spatial harvest planning is fundamental to forestry operations and Stanley automatically and quickly produces a range of spatial layouts that all meet your criteria and objectives.

Plus, your Stanley block solutions are dynamic and can be easily updated as new criteria – environmental regulations, for example – are introduced down-the-road.

Now, consider the alternative: Manual block layouts can take weeks, thousands of man hours and additional resources and ten of thousands of dollars (at least) to produce and you still only have one solution which is time consuming and challenging to revise.

Stanley block solutions are dynamic and can be easily updated as new criteria – environmental regulations, for example – are introduced down-the-road.

As for general purpose GIS software packages, these can assist with spatial analysis but they cannot automatically block or schedule hundreds of different alternatives – all of which are connected to the strategic plan.

WHAT IS THE BENEFIT OF USING THIS SOFTWARE?

By using Stanley to schedule harvests and other forest management plans you benefit from having a host of layout choices to choose from, all of which meet your planning objectives and observe spatial criteria or constraints such as opening-size restrictions.

Ultimately that means you have choices in how to proceed with your harvesting and other forest management activities plus you have the security of knowing that all your planning requirements have been considered.

Stanley will produce better layouts that meet all your planning criteria, than can be achieved through manual blocking techniques or non-
forestry specific GIS packages. And Stanley does so quickly and efficiently saving valuable time and resources.

Stanley also allows you to easily develop spatial harvest plans that meet public and private spatial policy and forest certification standards such as opening size and green-up delay limits. Similarly, Stanley allows you to assess the impact of adopting or implementing new spatial policies. For example, explore a range of spatial management alternatives that considers future forest condition and the spatial arrangement thereof to meet wildlife habitat objectives.

WHO IS USING IT?

Stanley is in use worldwide by forestry companies needing actionable spatial harvest plans that meet their strategic management objectives.

Government agencies and environmental groups in Australia, New Zealand, Asia, Canada and the United States are also using the software to manage public lands and communicate those plans to the public, to develop sustainable management policies and to monitor and review plans by companies carrying out harvesting activities on public lands.

For what planning problems/ on what occasions would I use this product?

Stanley is appropriate for planning issues that have a spatial component or when you need to develop explicit spatial treatment unit layouts on your GIS forest maps.

HOW DOES IT WORK?

BESIDES HARVEST BLOCK SCHEDULING, ARE THERE ANY OTHER APPLICATIONS FOR STANLEY?

Yes. If future forest states are important to you, then use Stanley to project the effects of harvesting and silviculture treatments on the forest state in 50, 100, 200 or more years into the future.

If future forest states are important to you, then use Stanley to project the effects of harvesting and silviculture treatments on the forest state in 50, 100, 200 or more years into the future.

How will harvesting activities impact forest composition and biodiversity? How will it affect location and arrangement of wildlife habitat? Stanley can let you see the answer and easily communicate the results to others.

CAN I CHANGE OR UPDATE THE BLOCK LAYOUT?

Yes, you can replan and respond to change – it’s a major benefit that makes Stanley such a unique blocking solution. Quickly change the spatial parameters on the fly and see what the impact is on your overall objective. Save several scenarios and compare those scenarios afterwards to find the best spatial harvest layout.
Working in conjunction with Spatial Woodstock you can easily edit your Stanley blocks—change treatment timing or prescribed action, add or remove polygons, create your own harvest units, and more.

As well, working in conjunction with Spatial Woodstock, easily edit your Stanley blocks such as change treatment timing or prescribed action, add or remove polygons to the harvest unit, create your own harvest units, and delete entire harvest units. The changes are automatically calculated so that you can instantly observe and assess the impact of those changes on your model objectives such as net revenues, harvest volumes, habitat supply and other non-timber objectives.

**CAN I INCORPORATE THE LOCAL KNOWLEDGE OF OPERATIONAL FORESTERS INTO MY HARVEST PLANS?**

Again, yes. Stanley is very flexible in letting you exercise your judgment and incorporating your knowledge of your land base into the long-term management plans.

On the flip side, you can also use the software to communicate to operations staff how tactical plans fit within the larger strategic plans.
WHAT KINDS OF HARVEST ACTIONS CAN IT SCHEDULE? CAN IT DO THESE SIMULTANEOUSLY?

Any harvest or silvicultural action – commercial thin, shelter thin, partial cut, fertilization etc. can be scheduled. These can all be done simultaneously or sequentially – depending on how you operate in your forest.

CAN I BALANCE MULTIPLE OBJECTIVES SHOULD I HAVE MORE THAN ONE PRIORITY?

Stanley will let you balance and weight the flows for up to three different objectives (e.g. sawlog harvest volume vs. pulp harvest volume vs. net present value) simultaneously while meeting spatial constraints such as adjacency and opening size.

This capability is incredibly important for managers who need to spatially block and schedule management treatments that must meet a number of key objectives.

Stanley also allows runtime periodic weights to the Stanley blocking objectives allowing you to control the solution live.

WILL I BE ABLE TO UNDERSTAND HOW STANLEY ARRIVED AT ITS BLOCKS?

Yes. Stanley is not a ‘black box’ solution. Rather, it offers a wide variety of reports to help you understand what is happening and why specific areas may not have been chosen for harvest.

HOW QUICKLY CAN I GET RESULTS?

That depends on your forest size and the number of constraints. If your forest is a million polygons, you are probably talking five minutes – so, relatively speaking, it’s fast.
HOW MUCH TIME DOES IT TAKE TO DO THE DATA LOAD – GET THE SPATIAL DATA READY?

Minutes. It is as simple as that. It may be that a couple of fields in your shapefile will need name changes, but since we are using your shapefiles and Woodstock model, you’ll be ready to go right away.

The benefits are enormous in that you can make major changes to your Woodstock (strategic) model, and not have to touch your strategic data.

Pre-aggregation of polygons into harvest units is not required. Stanley will both create the harvest blocks for you (i.e. automated aggregation phase) and schedule them to meet your overall objectives.

HOW LARGE SCALE/SMALL SCALE CAN THE PLANNING PROBLEMS BE ADDRESSED?

It is appropriate to use Stanley for 100 acre special wildlife habitat zones or large forest tracts in the millions of acres managed for multi-use or intensive forest plantations – it’s up to you.
HOW LONG INTO THE FUTURE CAN STANLEY BLOCK AND SCHEDULE?

This is up to you.

Stanley allows for long-term spatial layouts (i.e. several rotations) by allowing the assignment of multiple treatments to individual polygons (i.e. blocking of future forest types) allowing you to demonstrate true spatial harvest sustainability.

WHAT ARE THE OUTPUTS OF STANLEY?

Stanley offers a wide range of reports and tools to help you report on and implement your spatial management plans:

- GIS Block layout – harvest blocks are defined in your GIS by assigning a block name, action and timing to each polygon that is scheduled.
- Block summary reports and summaries that can be customized, filtered etc.
- Run time graphs and block statistics.
- Solution stats that provide insight to the spatial layout – reason codes.

WHAT ARE THE DATA REQUIREMENTS FOR STANLEY?

A shapefile and a Woodstock model.

WHAT ARE THE SYSTEM REQUIREMENTS FOR STANLEY?

Most business PC’s will work fine for running Stanley. Since large data sets and complex models can use up hard disk space and memory, we suggest you get as much of these as you can.

Stanley offers a wide range of reports and tools to help you report on and implement your spatial management plans.
WHAT OTHER SOFTWARE DO I REQUIRE TO USE STANLEY?

You will need Woodstock and Spatial Woodstock.

HOW DIFFICULT IS IT TO LEARN TO USE?

It is fairly easy to get up and running using Stanley – particularly if you are already familiar with Woodstock and Spatial Woodstock.

Additionally, the software is fully documented with user guides and a built-in help system.

WHAT ELSE?

WHAT OTHER SUPPORT SERVICES ARE AVAILABLE?

Remsoft offers users a number of comprehensive services so that they are never without help in using our software programs.

Maintenance Program: With the purchase of Stanley, you get one-year FREE subscription to the Remsoft Maintenance Program, offering you unlimited access by phone or email to our technical support team, plus any software upgrades.

This program is available in subsequent years for a fee and while it is optional, virtually every user subscribes to it – it is that useful.

Training: Remsoft users can participate in a number of training workshops, either at Remsoft offices or at your business premises. These workshops are geared specifically towards your organizations needs and planning goals.

User Group meetings: Each year Remsoft hosts user group meetings where software users gather to have a 'Master Class' with Remsoft experts to improve modeling techniques and approaches to planning, learn what is in the development pipeline or just to network with other licensed users.

Start-up Service: Remsoft has recently introduced a new start-up service whereby the people who know the software best – our developers and support team - will build models and help new users to understand how to apply the software.

A more hands-on approach than our training services, the Start-up service is a fast-track approach to using the Remsoft Spatial Planning System effectively.
FULLY INTEGRATED PLANNING SOLUTION

The Stanley harvest blocking and scheduling tool is fully integrated with Woodstock, Spatial Woodstock and the Allocation Optimizer allowing for better integration of Stanley spatial information into Woodstock and automated data flows between the models…one stop shop for compete spatial planning.

CONTACT REMSOFT

For more information or to find out whether the Allocation Optimizer can be of benefit to you, please contact us at:

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