



SKYLINE

Forestry engineering review from James Jones and Sons Ltd., Larbert, established for over 100 years

Number 1

June, 1976

New heavy crane range for Jones

JAMES JONES' hardwood extraction operations have been transformed by the introduction of a new range of heavy duty timber cranes extending the Highland Bear capability to 15 ton metres.

The Jones Matador fleet, once 12 or more strong, has been reduced to three part-time units. Now the bulk of the hardwood extraction and loading operations are being covered by heavy hardwood specialist tractors in combination with new introduction — 10 and 15 ton-metre Jonsered grapple cranes.

Scotland and Wales are established as the UK home for softwood, where much of the work for mechanising the woods in recent years has concentrated on this kind of crop and thinnings. Today there aren't many load handling problems left to tackle which involve softwood.

Hardwood now presents the next major problem. And of course it's assumed that Scotland with only softwood to work doesn't know anything about the hardwood game. But that's not true. Even today James Jones buy hardwood in the south of England for processing into boat building timber at one of their two hardwood sawmills in Scotland.

Wider sphere

Working with a number of merchants specialising in hardwood in Wales, England and south Scotland, James Jones have produced solutions to a number of hardwood handling problems which obviously have a wider sphere of application. And these solutions centre on the Jonsered equipment.

The management and engineering team from James Jones selected the Jonsered range of cranes



Highland Bear 10000 loading boatwood on to Foden 30-ton.8-wheeler in Stirlingshire.

because of its well-proven experience on hardwood logging in Germany, France and Austria. There it had successfully established itself against the competition of locally produced loaders, as

the best machine for the timber job. Jonsereds, like James Jones, have concentrated their machinery programme on wood handling. This may have disadvantages in less specialised industrial

work, but this focus is vital when it comes to the really rough logging operation.

The big cranes are new to Britain but have been in production for about five years, on the Continent. They are available in capacities of 10, 15 and 25 ton-metres.

Co-operation with Foden on the truck-mounted version of the 10 ton-metre crane has enabled us to make sure that the complex mounting required to spread the loading forces evenly through the chassis is properly considered. This is vital if reliable service for the vehicle and crane is to be obtained.

Logging system for Guatemala

JAMES JONES have sold a complete logging system — a trailer Alp, Highland Skidder with Highland Bear crane and eight ton trailer — to Guatemala for use in the natural forest. It is Jones' biggest single export order to date, worth in excess of £40,000 including back-up

and spares for two years.

The order results from interest in Jones' logging systems by the logging division of the appropriate department of the United Nations. Through them, a trailer Alp went to neighbouring El Salvador to

be operated under the supervision of a Norwegian logging adviser.

The successful operation of the Alp in El Salvador resulted in Guatemala getting interested and JJS were asked to supply a complete logging system.

WE ALL DEPEND ON WOOD

WOOD in the broadest sense is the basis for James Jones' activities. The company's progress therefore, is dependent on the health and activity of the wood producing and consuming industries.

The British timber industry to us is not a short term speculative investment and James Jones & Sons is a family business which has stood the test of time, financing from its own resources a steady programme of modernisation.

Unless politics intervene, James Jones, like other family businesses in the timber trade, will continue to save foreign exchange by reducing part of the £2000m import bill for timber in the most economic way.

Much of our industry will hopefully survive the current bombardment of legislative constraints which appear to grow inexorably. It is difficult to reconcile the cries for increased productivity with the additional day in each week which we estimate we have had to spend during the past year sorting out the unforeseen consequences of legislation.

It is lucky in a sense that the timber trade has been working below capacity, as at least part of the time required to grapple with the legislation has come from what would in more normal times be productive hours.

But business will not be slow for ever and when things improve where will all the time required for 'non productive' work come from?

It is a fact of life that the market for specialist machinery, designed for the British forest, is small. Woodlands in Britain are very different from those in Scandinavia or Canada, as anyone who has actually compared the conditions must agree.

To meet the varied UK requirements it seems important to us to make British based forest machinery available. But our experience has shown that the home market is not big enough on its own to support investment needed to develop satisfactorily, and that exports are vital if we are to continue to serve the UK forest industry.

Having said that, we would not want our UK customers to think we are only interested in export nowadays. We would like to assure them that this could not be further from the truth, because every machine which is exported from Larbert has first of all been developed in conjunction with our customers and has then had to prove itself in the home market. This will continue to be our policy.

This first issue of "Skyline" is intended to give our customers, staff and suppliers some idea about what is going on in the woods. We have tried to cover the widest possible field and hope that you will find something of interest.

David Reade is the editor and if you would like to contact him write to:-

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You will see elsewhere that we shall be attending a number of shows throughout the U.K. this year. If you can spare the time please come along and visit us.



Highland Mini-skidder pushes and pulls!

A front logging blade is now a standard option for the Jones Mini-skidder. Illustrated is the first front blade undergoing yard trials before delivery. Designed in conjunction with SWOA to meet their customer's requirements, the Highland skidder with its blade has been proving very successful in thinnings on Barwhillan Estate in south west Scotland.



A Highland Skidder at work.

HIGHLAND SKIDDER EXCELS IN EIRE

THE Eire Department of Lands have bought a Jones 75hp Highland Skidder following tests in the Ministry Forest at Dundrum, and will be putting it to work in the forests of South Ireland.

The trial site in Dundrum was undulating and fairly wet — typical of the conditions in which it will be expected to work — and the skidder, fitted with an 8000/2H winch,

extracted spruce logs averaging 20 cubic feet varying from 60 to 70 feet in length at an average of 15 tons per hour over a distance of 200 yards.

The performance more than measured up to the expectations of the Eire forestry officials and the Department of Lands have placed an order for a second unit.

A SWELL BEAR IN TOWN

THE PLUSH surroundings at Sunbury-on-Thames are a far cry from the sort of forest where a Highland Bear expects to go to work.

Eighteen months ago Brian Ford of P.I.M. Board was faced with two problems: increasing delays in the unloading of delivery vehicles, and the need to make the best use of his yard space.

His Highland Bear 3000 mounted on a 75 bhp tractor handles up to around 1,000 tons a week unloading vehicles and transferring back stock to the conveyor.

"We haven't lost five minutes through breakdowns in the past eighteen months and we have been able to increase the height of our stacks by several feet," said deputy managing director Ford.



Highland County 4000/4 with double drum winch and ground anchors.

Tree surgery and felling for council

THE PARKS Department of the Scottish town of Ayr has for some years used a squad of men, with a farm tractor and heavy duty single drum winch, for the thinning of small plantations, the felling of dangerous trees and the lopping of overhanging branches in housing areas.

In recent years this unit has not proved capable of coping

adequately with the greater volumes of small thinnings and the problems of tree surgery such as the lowering of large branches from standing trees with a single rope.

Well known

This elderly equipment has now been replaced by a Highland County 4000-4 tractor, with Igland 5000/2 double drum winch.

This machine is well known for effectively handling large volumes of thinnings in plantation conditions, and an easily demountable anchor has enabled it to tackle trees leaning dangerously over roads, walls and fences.

Double ropes

For de-limbing large hardwoods, the double ropes are able to pull the branch to one side, to the relief of house-owners with green-houses or glass porches nearby.

The operator and his Highland tractor are fully protected by a safety frame and guarding for radiator and engine. The Kyle and Carrick District Council now have a unit which can cope effectively with the roughest of woodland conditions or the most orderly housing estate.

TWO FOR THE FOREST

TWO new Highland Trailers - a six ton and an improved eight tonner - are now being manufactured at Larbert.

The six tonner fulfils the requirement for a forest trailer suitable for thinnings, superseding the five ton model. The increased payload allows operators to take advantage of the increased power available in today's medium sized tractor.

The eight ton trailer has an improved specification with heavier bearings and axle equipment and has been reclassified as a 'Super 8'. The well-proven bolster arrangement on this trailer with its ability to carry timber from one metre to eight metres long has been retained.

Both trailers are supplied with hydraulic brakes and lighting equipment.



A fully-laden six-ton trailer

FORESTRY SUCCESS STORY SPANS THE



Nigel Grant with his Alp in Loch Ard forest.

Good results in Scotland and Wales

CONTRACTORS in the Scottish Borders, Wales, Argyll and Inverness are getting good results from the Jones Alp. All shrewd operators are saving investment costs by integrating established equipment with new — owners have the choice of buying all new or adding their old winch to a new Alp.

Capabilities can be varied to suit the customer's needs. The 4000/2 Igland can still be used on highlead or skyline work or the 8000A/2H winch with air cooled brakes and hydraulic remote controls can be used for working heavier loads or longer distances, up to 600 to 700m.

The Alp system of skyline tensioning, locking and rope storage cuts the set-up time to the minimum. Nigel Grant, working thinnings in Aberfoyle with the Alp, reckons he sets up a skyline from rack to rack in about an hour.

The record so far stands at 40 minutes. But if two sup-

ports are needed it can take up to two hours.

"What we have done is to find a place for everything you need on the set up," says Bill Baillie, chief engineer at Larbert, who, comparing it to an umbrella (and you need one in the west), adds:

"It can be put up very quickly, including the built-in weather protection, and when moving to the next position everything furls away tidily."

Willie Black of Strachur, who bought his 4000/2 Igland in 1967 and has used it on highlead and cableway every day since, saw one of the major advantages of the Alp system was that he could convert from his old equipment to it in only four hours, and that the 1967 winch could be incorporated to tension the skyline, saving him nearly £500 on the initial cost.

When the distances are long or the logs heavy the Alp Cat comes into its own. Its skyline carriage incorporates a mechanism which pays out the line to the chokerman on the hill and suspends the load safely.

CANA LIKE JONE

THE JAMES JONES Alp is now belting timber as part of a Canadian Forests can logging interest in the project, mess for the Jones group.

The Alp is harvesting thinnings in Douglas fir and hemlock stands in the farm at Kelsey Bay, MacMillan Bloedel Douglas fir on steep slopes near Port

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Willie Black working his Alp using his original 1967 4000/2 winch for haul in and haul back.

Developed by Igland Jones to work with the Alp, it succeeds in giving the forest operator a very simple device to reduce the chokerman's efforts, suspend the load without locks or

strains and, if a cable parts, lowers the load to stop the carriage from running away. Both operators have out-put from thinnings of up to 150 tons per week.

SS STORY SPANS THE ATLANTIC

CANADIANS LIKE THE JONES ALP

THE JAMES JONES Alp is now being used on Vancouver Island for thinning timber as part of a Canadian Forest Service research project. North American logging interest in the project should produce substantial export business for the Jones group.

The Alp is harvesting thinnings in a major logging operation from 40-year-old Douglas fir and hemlock stands in the Beaufort area of MacMillan Bloedel's tree farm at Kelsey Bay. MacMillan Bloedel plans to try out the machine next to harvest Douglas fir on steep slopes near Port Alberni.

Dieter Oswald, forester in charge, reported that results so far have been highly promising. In addition to improving the stand of timber where it operated the Alp produced more fibre which can be used profitably as pulp wood.

West coast loggers apparently were sceptical of the machine at first because it seemed so small compared with customary yarding equipment. Its combination of three winches, light cables, and a short tower harnessed to power from a standard farm tractor operated by one man using a simple set of hand controls seemed too good to be true. But they now accept it's no plaything.

"Loggers here soon became convinced it isn't the amount of iron that counts when they saw that it could do the job efficiently with minimal damage to ground and to standing timber," says Oswald.

Fragile

Thinning is a delicate operation in coastal timber, where soils are fragile and all types of terrain are encountered. Rubber-tyred skidders generally have been tried, but foresters were reluctant to allow them where soil was boggy and, of course, they are not suitable for steep slopes. Conventional North American cable logging systems were found to be overpowered for the small logs and tended to do too much damage to the standing trees.

Oswald worked in Scotland and Norway on the Alp winch before taking up his position in Canada. Close liaison is maintained between the operators of the other winches now working in B.C. and Island Jones' own man based there.

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Dennis Ozero (left) rigging the Canadian Forest Service winch at Kelsey Bay.



Dennis Ozero winching in 35 cu. ft. of hemlock.

Powerful combination



George McKeever watches his first unit working hardwood at Carrickfergus N.I.

ARGATY'S HILL

THE HIGHLAND tracks fitted to a Fordson Dexta are making the going much easier on the Argaty Estate hill farm near Doune, Perthshire, owned by SWOA past chairman Captain D. Bowser.

The tracks are being used for hill transport and stock feeding on this well-known sheep and Highland cattle breeding estate.

Their two wheel drive agricultural tractor would get stuck on the hill several times a week and much of the stockman's time was lost going for help, and, if necessary, digging it out of difficulties.

Now the tractor with its



Highland tracks doing a typical hill job

highland tracks has made considerable time savings over the past year for the stockman working the 2,000

acre farm single-handed and has allowed him to reach parts of the hill which were previously inaccessible.

A 116 HP Highland County Forwarder fitted with a Highland Bear 4010 crane and a 12-ton trailer has been supplied to meet the special requirements of George McKeever, who works both hardwoods and softwoods in Northern Ireland.

It is George McKeever's second Highland Forwarder and it has a Ford 6 cylinder engine and 14 x 34 tyres. Its Highland Bear crane has a lifting capacity of 895kg (1975 lbs) at maximum reach of 17ft 6in which includes a hydraulic extension. The trailer, which has beam axle suspension and 19.5/22.5 tyres has a 12 ton payload. Its brakes are hydraulically activated.

Sawlogs

"Here in Northern Ireland," says George McKeever, "we have to transfer from the edge of the forest to the roadside for loading, and our extraction machines must be able to ground-skid timber and also forward it. I deliver sawlogs into my own sawmill from a road radius of about 18 miles.

"My first combination — a 75 HP Highland County with a Highland Bear crane and an 8 ton trailer — was first class, but I realised that my particular timber operations could be handled even more efficiently by a more powerful combination.

"My new one fits the bill perfectly, for the increase in horse power allows me to have a 12 ton Highland trailer and this increases overall productivity. And it also means that the forwarder is much faster on the road when I use it for transportation direct into the sawmill."

AT THE James Constance yard in Longhope, Gloucestershire, freshcut timber is debarked and stacked for twelve months — before being forwarded to the sawmill nearby.

John Allen, Constance's works director told Skyline: 'One man and the Highland Bear 2000 pick up around 8000 tons a year and it's only working on an average 2½ days a week.

'This has been going on since 1972 and all we've had to do to it is to replace a couple of sets of seals and pipes.'

When a County 754 with Highland Bear 3000 plus Highland 8 ton trailer unit was added to the Constance set up, the smaller unit was confined to yard only duties. With better balanced mechanisation the yard is able to expand at a steady rate.



600 TONS PER WEEK

CRACK extraction teams in South Africa have achieved 600 tons per week from their Highlander 754s fitted with Igland 4000/2 winches.

The management team from SAFI responsible for forest operations spent months visiting operations and contractors in Europe to study our methods.

They decided in the end that what they saw in Scotland could be adapted to suit their conditions best — 60/70 hp tractors with a good local service and "Highlandised" for the forest could, using Igland winches and tag lines produce very high weekly outputs for a relatively low capital investment.

The forest is 100 per cent pine, the lie of the ground medium to steep. The system works as follows — cutters go in and fell the trees and cross-cut them to sawlog length 12 to 18 feet or pulplogs. Then two chokermen working together with tag lines and choker chains work into the cut area chocking the loads.

At the same time the tractor is hauling out to the landing. Up to 200 yard distances it balances pretty well so that the chokermen each have a tagline ready by the time the tractor returns.

Hauling "long shortwood" like this the normal load is about three tons and steep hills are worked downwards. Otherwise extraction is normally the shortest possible distance to the road.

Stability

The stability of the tractor is so good that running round on the hill and diagonal drags are both possible and this helps to keep the turn time down.

When the logs reach the landing they are simply



A SAFI chokerman, near Nelspruit, Eastern Transvaal, shows the snap link set used for joining the tagline to the main winch rope. This enables the tractor to work continuously to maximum capacity reducing the turnaround time with this multiple tagline system.

sorted to their different grades using the double drum winch and this leaves the extracted timber ready for

road transport without further handling.

Where the terrain is easier, or the trees smaller, outputs from two-wheel drive tractors using 3000/2 Igland winches have reached 400-500 tons/week using the same felling and tag line extraction system.

The emphasis on planning the whole logging operation, training of operators and well organised preventative maintenance is paying off as weekly outputs are still increasing.

First big HB crane in UK

BULLOCK Bros of West Woodburn, Northumberland were the first purchasers of a Highland Bear 10,000 crane.

Harold Bullock told Skyline that he believed it was pointless to invest in any type of machine which was not thoroughly fitted for the rugged conditions imposed on it by timber handling in their stump-to-timber mill operation and that the Highland Bear 10,000 mounted on an eight wheeler highway truck would give them the best utilisation of the equipment.

"We wanted a crane which could perform efficiently year in year out at all times and in all weathers, with all sizes of timber and still have power to spare," he said.

"It is the same reasoning that led us to invest in an Igland double drum 8000/2H winch fitted to a County Super Six the year before."

The Highland Bear/ERF timber transporter provides Bullock with the vital haulage link between the two sides of the business — harvesting in the woods and effective production in the sawmill.

The operators find that the crane's ability to handle conifer pulp log sizes or hardwood saw logs ensures a



smooth loading and unloading procedure while the weather protection built into the cab ensures that bad weather does not delay the uplifting and delivery of the timber.

Since the Highland Bear 10,000 was fitted to the truck it has handled more than 30/35,000 tons at a negligible repair cost.

Prior to 1975 Bullock Bros had for several years operated a competitor's crane which had given good service. The Highland Bear had to compete with this reputation and it is to its credit that it now enjoys a reputation for reliability and high work rate all of its own.

BAILEY'S CORNER QUESTION

Where is your spare parts book?

PRODUCTION GRADING



Sandy Hogg (right) northern area manager of James Jones & Sons, with John Kiscock takes close interest in the grading of production from Culbin. This forest situated in the north east of Scotland was established on shifting sand dunes and in addition to producing wood has played an important part over the past thirty years in the stabilisation of the coastline.



HOT LOGGING

James Jones' logging operation in Central Scotland. Here a Highland forwarder is used to extract both saw logs and pulp direct from stump to landing. Availability of truck at the right moment enables the forwarder to transfer its load directly on to the highway transport. The 112 hp power unit is balanced ideally with its 12 ton trailer. "We hardly let the logs hit the ground from stump to sawmill" the operator confided to Skyline.



At James Jones & Sons' works at Larbert during discussions on the Noise Regulations for Tractor Safety Cabins, The Forestry Safety Council and Health & Safety Executive officials were able to study at first hand the technical problems and constructional limitations imposed on the manufacturers.

At the time of going to press our negotiations with the Health & Safety Executive are continuing and customers will be advised of the outcome when the position becomes clear.

Bill's fourth Bear

ABERFOYLE-based timber haulage contractor Bill Young has just taken delivery of his fourth Highland Bear. He bought his first one seven years ago.

"I'm a Highland Bear man", says Bill, "Because in my experience no other crane is so reliable, or fast for timber-loading. My units can load a ton a minute and we are

handling a load-out of 100 tons a day.

"But speed apart, Highland Bears are absolutely dependable. We maintain ours well, and so far they have needed very little attention. Any spare parts have been immediately available off the shelf. My Highland Bears keep me on top of the job . . . no matter how tight my loading schedule."



Bill Young talking to Bill Baillie of JJS and Charlie Elliot, chief engineer of A and R. Brownlie of Earliston.

The miraculous Highland Bear

JOHN GARRETT of Treleck in the Wye Valley is a contractor and timber merchant who with his son, Gary, and a workforce of fifteen other men specialises in the production of splits.

He uses a Highland Bear 2510 on a Ford 5000 and bumped up his production rate of splits by 60 per cent

compared to his previous arrangement — manual handling.

"I thought the man who invented the double drum winch should have a medal," he told Skyline. "But that Highland Bear/Major combination . . . it's miraculous."

Flexibility

Two years ago he put a Highland Bear/Ford 5000 combination to work with his automatic splitter and found the combination highly effective. Not only because production went up 60 per cent but because of the flexibility of use of the Highland Bear crane which he exploits in ingenious ways.

For example he generates a sawdust problem; the HB 2510 scoops it up with a sheet of plywood. And when he bought a parcel of wind-blow the owners were delighted when the stumps were deftly replaced.

John Garrett is proud of his son's expertise on the Highland Bear: "Gary can load 22 tons of one metre pulp in an hour or less with this unit" he told Skyline.



On completion of 50 years unbroken service with James Jones & Sons Ltd. Mr James G. Spark, assistant secretary, was guest of honour at a luncheon attended by the directors and his colleagues. He is seen (left) receiving a gold watch from the chairman, Mr T. Bruce Jones.

STOP PRESS

Show Reminders

James Jones will be at the following shows:

HIGHLAND from June 22-25; ROYAL SHOW, KENILWORTH from July 5 to 8; ROYAL WELSH from July 20 to 22.