



SKYLINE

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

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LOWTHER: JONES PULLS OUT ALL STOPS



At the Royal Show old and new technology work together: as 'The Burrell' gets up steam a Highland Bear 2510 on a Highlander places a sawlog — precisely.

The new HB 8000

THE HIGHLAND BEAR 8000 is the latest addition to the well proven range of Highland Bear truck cranes.

This new crane ideally meets the requirements for a timber loader with reach and capacity to handle sawlogs fast and economically.

Long reach — 7.3m (24 ft) means less moving in the forest to obtain a full load and 405 degree slewing enables full coverage when mounted at the rear end of rigid vehicles.

The new Highland Bear 8000 folds neatly over the cab, which combined with its long reach, makes it a highly suitable crane for use with articulated tractor units.



HB 8000 in brief:—
Reach 7.3m (24 ft)
Lift at max reach — 1000 kg
Slewing — 405 degree

If you would like to see your story in *Skyline* write to David Reade c/o James Jones, Larbert.

JAMES JONES of Larbert are pulling out all stops to make their stand the most comprehensive demonstration of wood handling equipment to be seen at the National Forestry Exhibition, on Lowther estates near Penrith, September 20 and 21.

Examples from across the extensive product range are being demonstrated at Lowther, providing a wide choice to meet the requirements of specialised contractor, private estate and small woodland owner.

Most spectacular item in the Jones display area is a new model of the Jones Skyline Alp, showing off its new three-drum slack-pulling carriage which pays out slack and saves valuable time and effort for the choker man.

New Product

Another important new product is the Highland Bear 8000 grapple crane specially designed to meet the requirement for a maximum reach crane with plenty of capacity for soft-wood sawlogs.

Examples of the Highland Bear grapple crane range from 2 to 25 ton metres will be there, as well as skidders and selected forwarders supported by a team of field staff to demonstrate and advise on individual requirements.

One new feature of the Highland Bear crane range is the indexator continuous rotator — available on all crane models — a further aid to the fast continuous working these cranes achieve.

Equipment to suit the need of small woodland owners will be shown in a special section of the Jones working area where equipment from £500 is to be demonstrated.

Of special interest should be the timber trailer range which can be used in combination with the normal estate tractor.

The whole range of equipment can be seen under continuous test in genuine working conditions and is worth a visit from anyone who makes it his business to know what is happening in the woods.



THE RIGHT MACHINE

"We are now confident that we have managed to find and use economically the right machine for the job — the James Jones Trailer Alp" says Ronnie Simmonds back from a round-world trip in Canada, USA, Brazil, Uruguay and Argentina. See the rest of his letter on our centre pages.

Cable-way.... UK

UPLAND BRITAIN contains many examples of extraction sites where ground damage could be a major factor in the eventual decision to use yarding techniques for thinning or clear-felling on a much more general basis.

Obviously where very steep terrain is involved conventional logging techniques with skidders only are ruled out. Yarding methods, either skyline or high-lead, are the only alternative outside of helicopters.

But deep peat occurs on flat sites as well as on the uplands. Ground damage from skidding operations is becoming increasingly unacceptable to timber growers as costs escalate all round.

Specialist skyline operators such as Taylor Hill who cover North Wales and Cheshire set the likely trend for the future.

Llanwrst

Llanwrst and Denbigh-based Taylor Hill are among the most experienced loggers in the UK specialising in skyline techniques. They have operated one of the first production models of the James Jones Tractor Alp since this system was developed in 1970 and have since added a Trailer Alp, both now deployed in the North Wales area.

Mike Taylor operates the James Jones Skyline Alp, and Andrew Hill, his partner the Highland 1164 with Island Jones 5000 winches, skidding the biggest timber downhill where the terrain allows access.

Skyline logging with its advantages of nil ground damage and low cost of operation, is sometimes criticised by foresters on grounds of inflexibility and slow set-up times.

Mike Taylor says: 'I certainly don't agree that it's inflexible. It can operate anywhere a skidding unit can, with the added advantage of being operable in terrain and conditions where four wheels won't go.'

'Obviously some conditions favour the ground skidding system which is why we work both in tandem. Our Trailer Alp is accompanied by the Highlander skidding unit.'

Productivity

'It's interesting to compare productivity. On this site we are moving around 300 tons in an average week, split 50-50. On other tasks the skyline comes out ahead: taken over the long term the skyline is more productive because it has far less downtime for repairs and maintenance.'

'Set-up time varies from one set of conditions to another. On



Mike Taylor: skylining downhill with the Jones Alp in North Wales — 'Far less down-time for repairs and maintenance'.

this site setting up time is 1½ hours from line to line over a distance of 300m.'

On the site at Vyrnwy were five forestry workers: one man on choker chains for the skyline,

one doing the same job with the skidder, plus a man snedding with a chain saw.

Mike Taylor and his partner Andrew Hill have been shifting about 60 tons a day of wind-

blow on the Vyrnwy site. ETC deploy three timber lorries each equipped with James Jones Highland Bear cranes on the 40 mile haul between Vyrnwy and Ellesmere.

TRAILER BEARS



TRAILER BEARS

which combine the proven advantages of Highland Bear cranes and Jones' timber trailers are finding themselves behind a growing variety of haulage vehicles. For the operator of a specialised skidding tractor the Trailer Bear provides a neat and inexpensive solution to the problem of short distance haulage between forest and truck landing or, as on many estates, between forest and sawmill.

This 7 ton Trailer Bear works on Lowther Estates in Cumbria.

Estate Forwarder

STRATHALLAN ESTATE in Auchterarder, Perthshire was one of the first estates in Scotland to recognise the potential of a four wheeled drive Highlander Forwarder for serving the estate sawmill directly from stump.

In 1970 they equipped with a Highland Bear 3000 and a Jones eight ton trailer.

Eight Years

This replaced a Fordson Major tractor with winches and now after eight years of forestry work and additional tasks found only on estates – lifting roof-beams for farm buildings, delivering firewood, repairing roads and stone picking – a second uprated Highland equipment combination has been acquired replacing the tractor and crane but retaining the forestry trailer.

First in UK

This Ford powered four wheel drive unit with Highland Bear 3010 crane – first of this type in the UK – is also equipped with Iglad Jones double drum winch.

On the estate which has mixed agricultural/forestry/sporting interests, the new set-up releases a man for other duties.

In the forest...



In the sawmill yard...



15000 Bear: the hardwood crane



HARRY EWINS' 15000

Highland Bear is shown in our recently commissioned workshop extension. The Bear is being built on to his 30 ton Magirus Deutz eight-wheeler. The outfit will be used for hauling hardwood logs, both his own and also on behalf of Harry Venables of Stafford.

The vehicle's layout has been completely designed in Larbert by Jones' staff as a specialist outfit for heavy hardwood. The Highland Bear 15000 lifts two tons at its maximum reach of 7.5m and five tons at 3m. Its ability to handle most logs met in the hardwood trade will save Harry the cost and effort of putting an additional loading crane on the job and should substantially improve vehicle utilisation and reduce turn-round times.

'African Letter'

HOW OFTEN do we not see a forestry machine being used under conditions entirely unsuited to it? True, it works, but a critical analysis of the cost of the operation would probably prove its use quite uneconomical.

Variable operating conditions, particularly with regard to topography, are numerous in our plantations and, while one cannot always keep a machine operating under optimum conditions, its occasional use under less favourable conditions can often be economically justified provided it spends the greater part of its life working under optimum circumstances.

The scale of the operation can also affect the choice of equipment and until fairly recently has restricted harvesting machines in this country to a relatively large number of small capacity units able to cope with a decentralized operation.

As we are in business to achieve the maximum return on capital employed, it is essential that we select the correct equipment for the job, particularly in the logging field. The topography of our afforested areas varies from fairly flat to steep, often rocky, slopes of 35° and can be roughly divided into two categories, viz. normal and abnormal. Normal areas are suitable for skidder and forwarder operation, whereas abnormal areas, although in some places accessible for skidders, are of such a nature that production by wheeled machines is reduced below the economical level.

These areas, therefore, call for specialized logging equipment such as crawler tractors with winches, skyline or high-lead cable installations. My company has over the years tried out numerous such systems but has been forced to abandon them because of their lack of versatility, clumsiness or expense. What we were looking for was an all-round unit, quick to set up, simple to operate and equally at home in thinnings or clearfellings.

R. Jones

Small.



GREECE: Steep slopes and dry climate in Greece mean that foresters must apply a selective system in harvesting — largest trees are removed leaving the smaller ones to grow on.

Uneven terrain and large log dimensions create special difficulties in areas remote from main roads where roading costs can be prohibitive. So the Greeks have evolved an integrated harvesting system using a network of low cost tractor roads to provide access to the forest area.

These tracks make it possible for the Island Jones Skyline, working up to 200 metres to haul out the heavy logs to a primary landing on a narrow forest track.

The swift erection and dismantling times for the skyline is really appreciated in areas where logs are few in number, and as a further measure to ensure maximum tractor utilisation the tower and skyline rigging can be quickly dismantled allowing the tractor to skid logs down the forest tracks to the lower landing and loading points where road transport can get access.

BARREL LOADING

DOUBLE DRUM
Winches are well known extraction tools for estate and contractors alike. Snaigow Estates in central Perthshire, have had their 3000/2 double drum winch since early 1976 and subsequently they purchased a Jones 5 ton trailer for transporting logs to the mill.

The volume of wood to be handled did not justify a Highland Bear, but by using their winches for barrel loading they have been able to combine the best of new and old methods.

Logs up to 2 tons have been handled this way, and the ability to control each end of the log individually is a much appreciated feature of double drum winches in this barrel loading application.



.is flexible



IN THE COURSE of a year James Jones Service Division provide training facilities and set up visits for foresters from all over the UK and overseas to learn the techniques necessary for effective operation of the Jones range of equipment.

This party of African foresters watch a Highland Skidder equipped with an 8000/2H eight ton hydraulically controlled winch logging hardwoods in Central Scotland.

A similar unit to this has just been ordered for despatch to New Guinea.

... 'African Letter'



The comments on the page opposite from R.N. Simmonds, a respected member of the timber industry in Southern Africa might have an application anywhere in the more productive forest areas in the UK.

During the past five years his company has concentrated on operation training and based on our winching systems has developed to a very high degree the skills and techniques of double drum winching, skidding, simple highlead and Alp cableway operations.

Last year a team from the area gave Jones' chief engineer, Bill Baillie a highlead set-up demonstration in which the total of shift from rack to rack over 140 metres distance was seven minutes.

EXPORT TO SRI LANKA

JAMES JONES have won an order for combined extraction and transport equipment from the Government Forestry Department of Sri Lanka.

Two pairs of tractors — 62 hp Highlander M2s, fitted with 3000/2 winches — each backed by a specially designed trailer to suit pole lengths in Sri Lanka and equipped with winch loading facility which enables the winches on the skidders to barrel load the trailers as well as work on normal extraction operations.

The Highlanders are based on the well proven Ford 3-cylinder engine and have been supplied with Jones' special logging equipment including guarding, special forestry wheels and forestry cabs.

The trailers are equipped with hydraulic brakes and have a five ton pay load.

The relatively easy ground conditions in Sri Lanka led to the choice of a low-cost simple and flexible Jones transport system. Shown is the equipment awaiting shipment.



Northern Ireland

Forest Service works Jones equipment hard in tough conditions.

THE NORTHERN Ireland Forest Service has introduced its fifth Jones cableway system — a Trailer Alp — for use in the soft going in the Northern Ireland forests.

Clear felling operations in the Mourne Mountains were the Trailer Alp's first 1978 assignment involving running in and training in thinnings over distances ranging from 300m to 600m.

Reduced set-up times with the Trailer Alp have convinced the NI service of the benefits to be had. And, of course, as a result of using cables the damage to root and drainage systems is negligible.

Ten Years Ago

It was that strange and powerful beast the Unimog which started it all off, ten years ago.

The James Jones logging equipment story started in Northern Ireland in October 1968, (writes W H B Forbes from Belfast), when arrangements were finalised to demonstrate a Unimog fitted with Igland 3000 winches. The trial was held that December in a County Derry forest where shallow peat lay over clay.

The trial was successful, the unit purchased and put to work in January 1969, continuing in full time harvesting operations until 1974 and spending its whole working life harvesting timber in forests growing on severe soft-ground conditions.

A second Unimog was purchased later in 1969 and is still working. Two further Unimogs were brought into operation in the mountains of Mourne and though these units were 'retired' in 1975 they are still being used as stand-by harvesting machines.

Holder-A55s

The Unimogs in the Mourne

area were replaced by Holder-A55 tractors fitted with Igland 3000 winches. The local staff were very sorry to see the Unimogs retired as they had given such reliable service.

From the date the Unimogs went into operation a very strict maintenance schedule was operated and this resulted in a very low down time for the units.

The James Jones Highlander 60 half-track proved to be a very suitable machine for the soft going in many Northern Ireland forests. A local modification was carried out to the Jones machine in that a small stacking blade was fitted to the front of the unit. The half-tracks have been used successfully for a number of years and five are now in operation within the Northern Ireland Forest Service.

The increase in clear felling operations resulted in the appearance in 1972 on the NI scene of the Highlander. These units were fitted with Igland 4000 winches and the Highland Bear 2000 and 2500 cranes.

Jones Highlead

In the same year the first Jones Highlead system was introduced for steep slope extraction and thinning over deep peat areas. Since then three Skyline units have been brought in for thinning operations, used frequently where soft ground conditions prohibit the use of ground skidding.

The first Highland Bear, an HB 5000, was fitted to a Foden eight wheeled unit in 1976 and since then a second HB 6010 rear mounted to a Foden eight-wheeled unit has joined the fleet.

Engineering and forestry staff have attended courses at the James Jones headquarters at Larbert to study servicing and operational techniques of the Jones equipment.



Top: reduced set-up times with the Trailer Alp have convinced the Northern Ireland Forest Service of the benefits to be had — and damage to root and drainage systems is negligible.

Above Right: Highlander with half-tracks — a go anywhere unit well suited to the soft ground conditions of Northern Ireland.

Left: Highlander with four big wheels and Highland Bear crane works on a landing sorting sawlogs and pulp.



Jock Scott working the line-bar at James Jones sawmill at Forbes, Morayshire. The mill is now in full operation having been rebuilt in the last twelve months.

OREGON:



Keeping the Alp landing clear with an old skidder is normal in big thinnings, like in this forest in Vancouver Island.



Outputs are 50/60 tons per day in 20/30 ft. lengths. Each set-up can, depending on distance, produce over 100 tons; this shot shows West Coast thinnings even more vividly.



Back in the UK an Alp owned by EFG in Ardgarton demonstrates how a skilful operator can turn logs on arrival at the roadside. This gives more landing space for log storage and allows loading out without stopping the winch.

Jones here to stay

LOGGERS in Oregon and British Columbia are finding increasing use for skyline systems such as the Jones Alp as forests on the West Coast reach first thinning stage and ground damage becomes an important consideration.

US publication 'Forest Industries' tells of an operator based at Vaughn, Oregon, working in the Coast Range hills who has been putting his Jones Alp to work in the USA.

The original project was to thin a 45 year stand of Douglas fir during the winter of '76/'77. Pete DiPaulo has worked with the Jones Alp on behalf of International Paper ever since.

North West Loggers

His set-up is a Leyland 270 farm tractor and Jones Trailer Alp: 'It's a far cry from the average north-west logging show, but it's a sight likely to become more common as north-west loggers turn more and more to thinning stands of small trees,' he says.

'I heard there was one of the machines for sale on Vancouver Island. So I went up and bought it as it stood. The device is perfect for commercial thinning on steep ground because it's large enough to haul out the logs, yet small enough so the logger doesn't have machinery "overkill".'

The thinning operation included logs as small as 4 in. and as large as 16 in. with a 6-7 in. average.

DiPaulo's crew was reaching about 800 feet for logs in the IP woodlands, but he is happy with the 2,100 ft. range with a capacity to haul logs up to 40 ft. long and 17 in. diameter. Production is about 180 logs a day.

DiPaulo contracts a self-loader to haul logs out, with all loads going to nearby mills in the Willamette Valley.

Logs 12 ins. and larger go a couple of miles to IP's sawmill-plywood mill complex at Vaughn. Smaller logs are trucked to Swansons in Noti for conversion into studs, or to Bohemia in Coburg, Oregon for laminated products stock. Some hemlock is hauled 35 miles to Cone Lumber in Gosben.

Real Simple

DiPaulo is the first to admit he's not a big-time operator. In fact, he sounds proud of it when he notes: 'I try to keep things real simple. Then you have a low investment.'

'I do well with the crumbs, and make more than some guys do with 10 times the volume I log.'

In an average year, DiPaulo produces 2 to 2.25 million board ft. of logs. Salvaging dead and windthrown timber or thinning healthy forests is a business not likely to dry up. 'With my equipment you can recover it economically.'

'Management is so important to logging,' stressed DiPaulo, who started in the business 32 years ago.

His style of management includes looking ahead to the kind of logging likely to be in vogue. With more thinning operations ahead, he plans to buy a second Alp and operate a two-Alp show.

Bill Baillie's Service Reminder.

All winches in our range have an over-run device. For your own safety check TODAY that it is properly adjusted.

NEW: SINGLE DRUM LINKAGE WINCH

THE NEW JONES single drum winch system incorporates compensating linkage arms and logging plate which move as one unit and remain in the vertical plane.

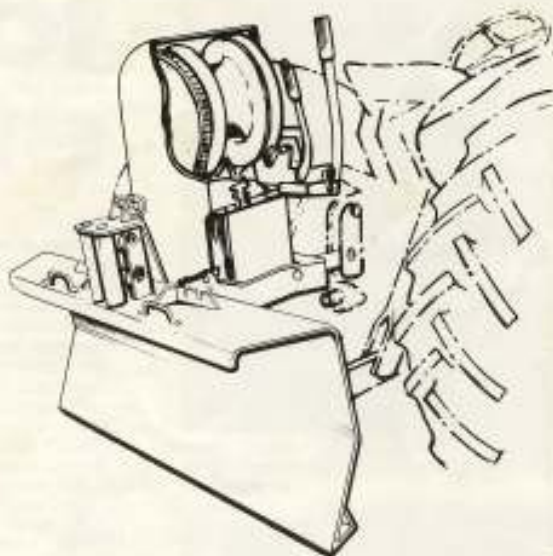
The unit is compatible with any tractor with three point linkage. Two power levels are available — three ton and five ton.

Raise the unit to the 'skid' position for orthodox use in timber.

Lower to ground level with a weight transfer anchor for heavy haulage with the winch working at maximum mechanical advantage. And use the logging plate as a rear mounted skidding blade.

It takes only ten minutes to fit or take off. Where modern tractor cabins obstruct fittings for the winch a three point linkage mounting can solve the problem.

Use it for mole ploughing, working in timber, in plant hire and on the estate. This new single drum winch from Iglad Jones is multipurpose.



Note the single-lever control operating both clutch and winch-brake.

TEN TON TRAILER PLUGS HOLE IN RANGE

LATEST ADDITION to Jones' well proven range of forest trailers fills the gap between seven ton and twelve ton units. It offers a very high standard specification, ten ton payload and flexible bolster design suitable for shortwood, sawlogs and poles up to 10m.

The beam axle suspension and four large flotation tyres — 13.5 x 17 — increase the trailer's ability to negotiate the roughest conditions without the need for excessive tractive force from the towing vehicle. Ground clearance exceeds 20 in and all four axles are braked.

ROTATOR

THE INDEXATOR continuous rotator is now in use throughout the UK timber industry handling pulp, sawlogs and heavy hardwoods. It is available in two sizes for fitting to small or large cranes.

The unit is robustly built of high quality material and being easy to service and maintain gives you a long period of trouble free operation.

Different linkages are available to enable the rotator to be fitted to most makes of crane.

A special feature is the robust protection shield provided for the hose connections.



Large hydraulic cranes revolutionise wood-yard handling

SAWMILLS and wood processors are making growing use of long reach, big capacity Highland Bear and Jonsered grapple cranes for continuous work with logs in round wood yards. These cranes are mounted statically or fitted to mobile units to meet customers' needs.

Their ability to work without a sling, high speed of operation and the specialist nature of the business explains why the installation of this static Jonsered GA123 15 ton metre crane with a 40 ft. reach at the Wyroc chipboard plant at Hexham, Northumberland, allows one man to unload delivered slabwood and round wood from forest thinnings and to feed the conveyor which supplies the chipping unit.

The forty ft. boom permits the stacking and storing of sufficient timber within the crane's reach to feed the chipper on three-shift, continuous basis.

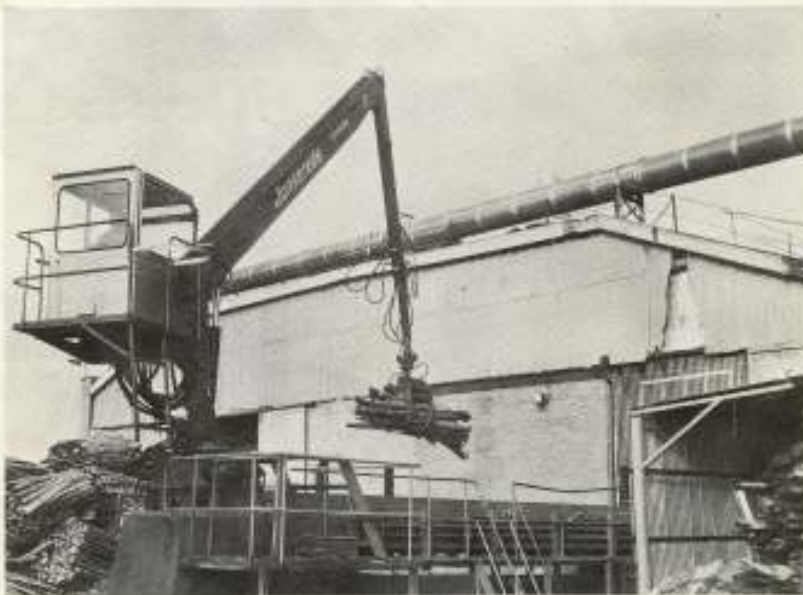
The crane is mounted on a concrete column.

One Man Control

The driver has excellent visibility from his totally enclosed cab which is heated for driver comfort at night and in cold weather. Situated in the cab are controls for the crane, conveyor and chipping plant.

A recent introduction and a special feature to Highland Bear and Jonsered cranes used on a continuous shift basis is an ASSA 'auto lube' system developed from the commercial vehicle application.

The system eliminates routine service 'greasing' and removes all the inevitable uncertainty of blocked or partially choked nipples and even the overlooking of points by service mechanics. An ASSA system, clearly, is the up-to-date method of ensuring regular lubrication under all conditions.



Space costs necessitate best use of space for storage so one needs to look at the new generation of Highland Bears — static as shown here at Hexham, or self-powered with a reach.